

WASTE MANAGEMENT STRATEGY 2023-2025

Tiwi Islands Regional Council



AUGUST 2023

Acknowledgement of Country

Tiwi Islands Regional Council acknowledge the Tiwi people as the Traditional owners of all the land and waters of Bathurst and Melville Islands.



Message from the Mayor



On behalf of the Tiwi Islands Regional Council (TIRC), I present the TIRC Waste Management Strategy 2023 – 2025 (the Strategy).

In keeping with our Vision to provide *Ngawa Tiwi api ngawurrayamangi nginingawula murrakupun* or Service for a Tiwi Future, and as part of our commitment to managing resources in an environmentally sustainable manner while respecting country and culture, the Strategy forms an important part of TIRC's overall forward planning.

Following an evaluation and assessment process of our current waste management capacity, the Strategy looks at where we are today, where we want to be in the future and what actions we can take to progress towards our goals.

Good waste management practices require a collaborative, whole of community approach, and TIRC seek to lead our communities to best practice waste management and care for our unique environment in the most efficient and effective ways.

Historically, NT Regional councils have been excluded from targets set out in plans such as the National Waste Policy Action Plan 2019, however there is new commitment from State and Federal Governments to improve access to waste management schemes, enabling remote communities to better manage waste.

Myself, the Council, CEO and TIRC staff are eager to work with Tiwi residents and businesses towards better, cleaner and more efficient waste management practices to ensure our land and water ways thrive into the future.

If you would like more information on the Strategy, or on waste management practices on the Islands, please feel free to contact info@tiwiislands.nt.gov.au

Pirrawayingi
Mayor

Contents

MESSAGE FROM THE MAYOR	2
INTRODUCTION.....	5
THE COMMUNITIES	6
MILIKIPATI	6
PIRLANGIMPI.....	6
WURRUMIYANGA.....	8
NORTHERN TERRITORY CIRCULAR ECONOMY STRATEGY 2022-2027	8
NATIONAL WASTE POLICY ACTION PLAN 2019	9
APCO (AUSTRALIAN PACKAGING COVENANT ORGANISATION) PRIORITY PROJECTS FY 23	10
TIWI LAND AND MARINE RANGERS	10
TIWI ISLANDS REGIONAL COUNCIL – REGIONAL PLAN 2022-2023	10
CHALLENGES	11
POPULATION	11
LOCATION.....	11
FUNDING	11
WHERE WE ARE TODAY	11
WASTE SERVICES	11
KERBSIDE COLLECTION	11
EXCESS WASTE REMOVAL.....	11
LITTER PATROL.....	12
PRE-CYCLONE CLEAN-UP	12
COMMUNITY CLEAN-UP DAYS	12
LANDFILL.....	12
TRANSFER STATION	13
PUBLIC EVENTS	13
WASTE STREAMS AND QUANTITIES	14
MILIKIPATI	14
PIRLANGIMPI.....	14
WURRUMIYANGA.....	15
RESOURCE RECOVERY.....	15
WHERE DO WE WANT TO BE	16
GOALS AND KEY ACTIVITIES	16
GOAL 1: IMPLEMENT BETTER PRACTICE WASTE MANAGEMENT	16
GOAL 2: DEVELOP WASTE MANAGEMENT INFRASTRUCTURE	16
GOAL 3: INITIATE KEY STAKEHOLDER ENGAGEMENT AND PARTNERING OPPORTUNITIES	17
GOAL 4: SUSTAINABLE WASTE MANAGEMENT PLAN	17
ACTION PLAN TO PROGRESS GOALS	18
OPPORTUNITIES	21
COMMUNITY EDUCATION AND ENGAGEMENT.....	21
INDUSTRY SUPPORT	21

ORGANIC WASTE.....	21
PRODUCT STEWARDSHIP SCHEMES.....	22
ILLEGAL DUMPING.....	22
LITTER.....	23
HOW DO WE GET THERE.....	24
REPORTING.....	24
BASELINE DATA.....	24
MEASURING SUCCESS.....	24
GOAL 1: IMPLEMENT BETTER PRACTICE WASTE MANAGEMENT.....	24
JULY 2023.....	24
ONGOING.....	24
JULY 2023.....	24
DECEMBER 2023.....	24
GOAL 2: DEVELOP WASTE MANAGEMENT INFRASTRUCTURE.....	25
JULY 2023.....	25
AUGUST 2023.....	25
SEPTEMBER 2023.....	25
ONGOING.....	25
GOAL 3: INITIATE KEY STAKEHOLDER ENGAGEMENT AND PARTNERING OPPORTUNITIES.....	25
JULY 2023.....	25
AUGUST 2023.....	25
DECEMBER 2023.....	25
ONGOING.....	25
GOAL 4: SUSTAINABLE WASTE MANAGEMENT PLAN.....	26
IMMEDIATE.....	26
AUGUST 2023.....	26
SEPTEMBER 2023.....	26
JULY 2024.....	26
ONGOING.....	26
REVIEW.....	26
REFERENCES.....	26

WASTE MANAGEMENT STRATEGY 2023-2025

Tiwi Islands Regional Council

INTRODUCTION

Melville and Bathurst Islands are collectively known as the Tiwi Islands, the home of the Tiwi people. The Tiwi People have occupied the islands since at least the last ice age, when the islands were separated from the mainland approximately 11,000 years ago. After years of isolation the Tiwi have a unique language and culture, including dance, song and art.

The islands are 8,320 square kilometres of eucalypt, paperbark and monsoon vine forest, coastal wetlands, secluded waterfalls and deserted beaches. An extensive and magnificent array of barely touched mangrove lined river and creek systems, sand flats and coastal reefs, all abundant with marine life, means the Islands are an unspoiled paradise. In addition to its natural beauty and marine life, which also includes crocodiles, dolphins, sea turtles and dugong, the Islands are also home to a stunning array of bird and animal life, such as buffalo, wallabies, bandicoots, flying fox, kingfishers, jabiru, parrots, eagles, falcons and hawks plus countless varieties of water and wading birds. There are some 56 species of birds, 27 species of reptiles and 19 species of mammals.

The Tiwi Islands Regional Council (TIRC) was created in 2008 through the amalgamation of remote NT councils. According to ABS data, in 2021 the Islands had a population of 2,348 (ABS). The Tiwi Islands are Aboriginal freehold land and leases need to be obtained from the Tiwi Land Council to operate waste management facilities.

The following waste services are provided in-house by Council:

- Curbside general waste collection twice weekly
- Commercial general waste collection twice weekly
- Public bins collected twice weekly
- Litter collection
- Waste Management Facilities
- Pre-cyclone clean-up
- Hard waste collection

Individual communities on the islands participate in the following activities:

- Clean-up Australia Day
- The Great Northern Clean-up
- Community clean up days

THE COMMUNITIES

MILIKIPATI

Milikapiti, or Snake Bay, is one of two Tiwi communities on Melville Island. Milikapiti community was established on the north coast of Melville Island in 1941 as a permanent Aboriginal settlement by the Native Affairs Branch of the Northern Territory Administration.

Milikapiti is in a beautiful location nestled on hilly country on the edge of the large estuary of the Tjipripu River. Facilities include the store, club, clinic, primary school, Centrelink office, recreation hall, library and sports oval. There is also a fishing lodge with accommodation.

The landfill facility for the community is located approximately 2 kms south from the town. The landfilling method was previously by excavating a small trench that was difficult to manage as equipment was not able to be utilised to compact disposed material. Landfilling is now by the aboveground method allowing better management of wastes disposed at site.

Waste Streams accepted:

- Fuel and oils
- Vegetable oil
- Packaging (cardboard, drink containers, plastics, Styrofoam, etc)
- Pallets
- Organics
- Medical
- Car parts
- Fire extinguishers and gas bottles
- Electronic waste (including white goods)
- Textiles
- Furniture
- Car bodies
- Construction and demolition

PIRLANGIMPI

Pirlangimpi, or Garden Point, is one of two communities on Melville Island and comprises approximately 350 people.

Facilities include a primary school, a police station, a small supermarket, a creche, a clinic, a social club and an airstrip. Croker Island receives freight barges once a week and there are regular flights to Croker Island on Fly Tiwi, twice a day Monday to Friday.

The landfill facility for the community is located just over two kilometres south-east from the town. The landfilling method was a trench method that was difficult to manage as

equipment was not able to be utilised to compact disposed material. Landfilling is now by the aboveground method allowing better management of wastes disposed at site. The following photos show the trench being used at Pirlangimpi and the newly constructed above ground cells.



TRENCH AUGUST 2021



ABOVEGROUND CONSTRUCTION SEPTEMBER 2022

Waste Streams accepted:

- Fuel and oils
- Vegetable oil
- Packaging (cardboard, drink containers, plastics, styrofoam, etc)
- Pallets
- Organics
- Medical
- Car parts
- Fire extinguishers and gas bottles
- Electronic waste (including white goods)
- Textiles
- Furniture
- Car bodies
- Construction and demolition
- Cleaning chemicals

WURRUMIYANGA

Wurrumiyanga on Bathurst Island is the largest community on the Tiwi Islands with approximately 2,000 people. Facilities include two small supermarkets, a take-away food shop, a clinic with nurses and a permanent doctor, a police station and primary and secondary schools.

There is an inter-island ferry connecting to Melville Island and a freight barge comes from Darwin twice a week on Tuesdays and Thursdays. The small airport is serviced by Fly Tiwi with daily return flights from Darwin.

The landfill facility for the community is located approximately 6 kms west of the town.

Waste Streams accepted:

- Fuel and oils
- Vegetable oil
- Packaging (cardboard, drink containers, plastics, styrofoam, etc)
- Pallets
- Organics
- Car parts
- Fire extinguishers and gas bottles
- Electronic Waste (including white goods)
- Textiles
- Furniture
- Car bodies
- Construction and demolition
- Cleaning chemicals

NORTHERN TERRITORY CIRCULAR ECONOMY STRATEGY 2022-2027

The actions that the NT Government will take include:

- The phase out and ban of certain Problematic Single Use Plastics (PSUPs) by 2025
- Implement a risk based licensing and registration scheme
- Strengthen law and policy around the storage and disposal of hazardous waste
- Increase community and business awareness about the impacts of waste and pollution on the environment while raising awareness about the benefits of transitioning to a circular economy
- Deter unlawful disposal
- Provide advice to local communities and councils to support minimising issues associated with litter and illegal dumping in regional and remote areas
- Map and understand 'waste' material flows

- Review and develop incentives and programmes to encourage demand and local markets to encourage recovery and reuse
- Contribute to research into the use of recycled materials in building and road construction
- Encourage innovation and facilitated adoption of resource recovery and recycling technology
- With support of the Commonwealth, undertake a grants programme that enhance tyres, plastics, glass, paper and cardboard recycling and reuse capacity and capability in the NT
- Investigate alternative markets to reduce food waste

NATIONAL WASTE POLICY ACTION PLAN 2019

The targets set out in the National Waste Policy Action Plan are:

1. *Ban the export of waste plastic, paper, glass and tyres, commencing in the second half of 2020*
2. *Reduce total waste generated in Australia by 10% per person by 2030*
3. *80% average resource recovery rate from all waste streams following the waste hierarchy by 2030*
4. *Significantly increase the use of recycled content by governments and industry*
5. *Phase out problematic and unnecessary plastics by 2025*
6. *Halve the amount of organic waste sent to landfill by 2030*
7. *Make comprehensive, economy-wide and timely data publicly available to support better consumer, investment and policy decisions*

Historically, national waste reduction targets have been met by metropolitan areas in the southern states while NT Regional Councils have been effectively excluded from schemes that are implemented to meet these targets. The commitment by the Federal Government to improve access to schemes for remote communities is welcomed. The commitment is beginning to manifest following collaboration between LGANT and Tyre Stewardship Australia to use crumbed rubber in demonstration roads in remote and urban locations.

Other schemes that will benefit the NT directly are:

- The commencement of the household battery scheme in 2022
- The proposed product stewardship scheme for end of life vehicles with a report being due end June 2023

APCO (AUSTRALIAN PACKAGING COVENANT ORGANISATION) PRIORITY PROJECTS FY 23

The APCO priority projects for FY 23 are:

ANZPAC Oil Bottle Program

This has also been funded by the National PSIF to design a national collection and recovery programme for used motor oil bottles.

Road-map for Non-Recyclables

The road-map will guide decision making on materials and items that aren't currently able to be recycled, replaced, redesigned or to be developed as a take-back programme to reduce the amount of packaging.

Problematic and Unnecessary SUP (single use plastic) Packaging Program

This programme will support Brand Owners to phase out problematic and unnecessary SUPs by reviewing and potentially updating the framework on what constitutes a SUP and developing a list of priority items for phase out.

Annual material flow analysis

This project will use 2020/21 material flow data and with the updated Material Flow Analysis modelling to produce the annual measurement of progress towards the 2025 targets.

These projects support industry to accelerate the uptake of different programmes endorsed by the Federal Government. It is recognized that APCO acts on behalf of its members which is industry for the most part, however the flow-on effects from their progression will improve difficult to recover waste streams in remote communities such as eliminating plastic take away containers and polystyrene packaging.

TIWI LAND AND MARINE RANGERS

The rangers have various land and marine management plans that can be downloaded from

<https://tiwilandcouncil.com/index.cfm?fuseaction=page&p=260&l=2&id=67&smid=191>

TIWI ISLANDS REGIONAL COUNCIL - REGIONAL PLAN 2022-2023

Council's Regional Plan Goal 4 *Manage resources in an environmentally sustainable manner, respecting country and culture* has the following objectives:

- 1.2 Provide regular waste collection and responsible tip management
- 4.2 Implement best practice waste disposal and management
- 4.3 Promote best practice disposal of e-waste and recycling

The strategic goals that TIRC will use to meet these objectives are as follows:

- Implement better practice waste management
- Develop waste management infrastructure
- Initiate key stakeholder engagement and partnering opportunities
- Sustainable waste management plan

CHALLENGES

POPULATION

Tiwi Islands Regional Council has a coastline of 1,000 km, covers a land area of 8,320 km² and has an estimated population of 2,2773 (2020).

LOCATION

The Tiwi Islands are located 100 km north of Darwin. Bathurst Island is accessible from the mainland by air and sea year-round. Inter-island sea transport is available between Bathurst and Melville Islands. The communities of Pirlangimpi and Wurrumiyanga both have flights available through Fly Tiwi. Costs for transport to and from remote communities is expensive and moving hazardous wastes via a licensed transporter is possible only by obtaining grant funding.

FUNDING

The low population results in a limited rate base for Tiwi Islands Regional Council and grant funding is sought for essential services for the community including waste management. Improvements to the current waste management practices needs to take into account the financial viability of the Council and prioritise areas for improvement based on health and environmental risk.

WHERE WE ARE TODAY

WASTE SERVICES

The Tiwi Islands Regional Council provides a range of waste management services for residents, commercial operations and other organisations such as schools.

KERBSIDE COLLECTION

TIRC provides a twice weekly kerbside collection for general waste to residents, commercial operations and other organisations while also providing public bins within their communities. The service is undertaken by Council staff utilising Council vehicles. Properties can order additional bins from Council for a fee.

EXCESS WASTE REMOVAL

TIRC provides a service during business hours collecting excess rubbish bags and hard waste from the community utilising a trailer pickup. This material is taken to the local Waste Management Facility and disposed directly at the active tip face.

LITTER PATROL

TIRC employs staff members to collect litter daily from public areas on the main road. Litter is prevalent within the communities and material quickly becomes windblown. The community of Milikapiti conducts regular litter cleanups utilising 'waste warrior' volunteers. This initiative could be emulated in other Tiwi Island communities with the assistance of council to remove and dispose of collected litter. Milikapiti council staff also collects community litter twice a week.

PRE-CYCLONE CLEAN-UP

TIRC conducts hard rubbish collections in all communities prior to the wet season each year. An additional collection is conducted when a cyclone warning is announced for the potentially affected community.

COMMUNITY CLEAN-UP DAYS

TIRC participates in clean-up events annually in collaboration with the community and hosts a bbq post clean-up.

LANDFILL

TIRC manages Waste Management Facilities in the communities of Milikapiti, Pirlangimpi and Wurrumiyanga. The Wurrumiyanga Waste Management Facility is not currently licensed and has negotiated a lease with the Tiwi Land Council. An Environment Protection Licence under the *Waste Management and Pollution Control Act 1998* is to be applied for through the Department of Environment, Parks and Water Security.

The landfill sites now have restrictions in place for the general public. All three waste management facilities are fenced/ready to be fenced and are manned during opening hours. Skip bins have been made available at landfill entrances to allow residents to dispose after hours. The use of skip bins will be monitored to ensure that appropriate material only is being disposed. Commercial operators can only access the waste management facility during opening hours and are not able to use the after hour skip bins.

Waste types accepted for disposal in the landfill include:

- Kerbside collection
- Green waste
- Bulky items such as furniture
- Construction and demolition waste
- Other general waste

Listed wastes such as tyres and car batteries when identified in landfill deposits are removed and stored at the transfer station. Listed wastes dropped off at the Pirlangimpi

and Milikapiti Waste Management Facilities are transported to Wurrumiyanga on a regular basis.

TRANSFER STATION

TIRC manages a transfer station at each of their Waste Management Facilities. The transfer station is accessible during opening hours only.

Waste types accepted are:

- Waste mineral oil
- Car batteries
- Electronic waste
- Tyres
- White goods
- Gas bottles
- General waste – residential and commercial
- Green waste – residential and commercial
- Scrap metal

Listed waste materials collected at Pirlangimpi and Milikapiti are removed weekly from the site and transferred to the Wurrumiyanga Waste Management Facility. This will ensure that the storage of listed waste on Croker Island transfer stations will not require licencing under the Waste Management and Pollution Control Act 1998. TIRC is committed to obtaining an Environment Protection Licence as soon as practicable. To this end, TIRC is working closely with the Tiwi Land Council and the Department of Environment, Parks and Water Security.

PUBLIC EVENTS

TIRC provides bins for public events and disposes of the material at the landfill site. Typically, waste from events consists of drink containers and napkins.

**WASTE STREAMS AND QUANTITIES
MILIKIPATI**

WASTE TYPE	VOLUME DISPOSED		CONVERTED ANNUAL TONNAGE
	PER WEEK m ³	PER YEAR m ³	
Kerbside collection	64	3328	1175
Hard rubbish (car parts, tyres, etc)*	9	468	165
Commercial	16	832	293
Cardboard & Pallets	18	936	330
Green	4	208	73
Waste Oil	10 litres	520	183
Electronic Waste	0.5	26	9

Scrap vehicles – approximately 400 on site

*Tyres and other materials unsuitable for landfill are removed from the tip face and stored appropriately.

White goods x 300

PIRLANGIMPI

WASTE TYPE	VOLUME DISPOSED		CONVERTED ANNUAL TONNAGE
	PER WEEK m ³	PER YEAR m ³	
Kerbside collection	35	1820	642
Hard rubbish (car parts, tyres, etc)*	3	156	408
Commercial	9	468	165
Cardboard & Pallets	4	208	73
Green	4	208	73
Waste Oil	5 litres	260	91
Electronic Waste	0.2	10	3
Cardboard	17		.884

Vehicles: 1 per month

Tyres: 1 set per month

White goods: 1 per week

Car batteries: 2 per month

E-waste: Nil

WURRUMIYANGA

WASTE TYPE	VOLUME DISPOSED		CONVERTED ANNUAL TONNAGE
	PER WEEK m ³	PER YEAR m ³	
Kerbside collection	110	5720	2019
Hard rubbish (car parts, tyres, etc)*	17	884	312
Commercial	47	2444	863
Cardboard & Pallets	38	1976	697
Green	19	988	348
Waste Oil	50 litres	2600	918
Electronic Waste	0.5	26	9

Vehicles: 1 every month

Tyres: 4 every month

White goods: 1 per week

Car batteries: 2 per month

E-Waste: Nil

RESOURCE RECOVERY

TIRC have a can crusher that enables volume of cash for containers to be reduced for transport purposes. A licence to operate a collection depot will be obtained prior to offering residents cash for containers. TIRC currently have an agreement with Sea Swift to transport recyclable material to Darwin for free.

TIRC provides public drop off points for empty 200L drums and chemical drums. Both these recycling schemes are free and relatively easy to access even in remote communities. Other options for free recycling could be investigated through Terracycle which is a company that partners with industry to provide boxes for specific items that can be returned at no cost to Council or the community. Other recycling options that come at a cost are also available through Terracycle and costs involved depend on location.

WHERE DO WE WANT TO BE

TIRC is committed to applying a collaborative approach to improving waste management for the betterment of the environment and community health. Council will work with Government Agencies, residents, business, schools, industry and other organisations to achieve financially viable solutions to current issues impacting the effectiveness of responsible waste management.

A Waste Management and Recycling Group is meeting on a regular basis and commenced in March 2021. Stakeholders include the supermarkets, Bathurst Island Housing, Tiwi Enterprises, Office of Township Leasing, Territory Housing, Office Of Chief Minister, Catholic Care and Red Cross. The group has been established in recognition of the need to work together to transform waste management practices in their communities.

TIRC recognises the value of data collection as a tool for informing actions. TIRC, with assistance from LGANT, will work with staff to identify and develop efficient methods for collecting data on waste streams, generators and source. This will allow the council to prioritise actions and resources where it will make the biggest difference for residents and the environment.

GOALS AND KEY ACTIVITIES

GOAL 1: Implement Better Practice Waste Management

Tiwi Islands Regional Council is committed to implementing better practice waste management to improve the physical environment and people's health.

This goal will be achieved by:

- 1.1 Establishing a baseline through data collection
- 1.2 Research and development
- 1.3 Seeking out additional funding to implement initiatives
- 1.4 Collaboration with the Waste Management Industry
- 1.5 Ongoing data collection
- 1.6 Implementing recycling services tailored to community needs
- 1.7 Providing education programmes
- 1.8 Installing appropriate signage at transfer stations
- 1.9 Attaining an Environmental Licence for the Wurrumiyanga Waste Management Facility
- 1.10 Improving kerbside waste collection service and building capacity of staff through heavy vehicle licensing

GOAL 2: Develop Waste Management Infrastructure

The Tiwi Islands has minimal infrastructure to enable improvement to waste management on behalf of its residents. It is recognised that in order to achieve outcomes from this strategy investment will be needed to implement change.

This goal will be achieved by:

- 2.1 Establishing a baseline through data collection
- 2.2 Ongoing data collection
- 2.3 Developing a Waste Management Facility site and management plan
- 2.4 Upgrading waste management facilities to improve access and operations
- 2.5 Seeking out additional funding to cover infrastructure costs
- 2.6 Improving resources such as staff shortages
- 2.7 Working towards environmental compliance

GOAL 3: Initiate Key Stakeholder Engagement and Partnering Opportunities

Tiwi Islands Regional Council has identified a range of stakeholders including Tiwi Islands Land Council, the Local Authority, schools, local business and government agencies. Collaboration with stakeholders will assist the council to improve social and economical outcomes through this strategy.

This goal will be achieved by:

- 3.1 Establishing a baseline
- 3.2 Ongoing data collection
- 3.3 Identifying business opportunities
- 3.4 Collaborating with business
- 3.5 Providing education
- 3.6 Installing appropriate signage
- 3.6 Seeking funding opportunities

GOAL 4: Sustainable Waste Management Plan

A sustainable waste management plan will assist the Tiwi Islands Regional Council to identify processes for the treatment of wastes received at their facilities. Clearly identifying what the materials are will help the council to formalise their waste management practices and allow continuous improvement.

This goal will be achieved by:

- 4.1 Establishing a baseline
- 4.2 Ongoing collection of data
- 4.3 Conducting a cost/benefit analysis
- 4.4 Improving resources – staffing, physical and financial
- 4.5 Reviewing business opportunities
- 4.6 Recovering costs

ACTION PLAN TO PROGRESS GOALS

The following table will establish the priority activities for each of the 4 goals set by the strategy.

GOAL 1: IMPLEMENT BETTER PRACTICE WASTE MANAGEMENT			
ACTIVITY	ACTION	RESPONSIBILITY	TIMEFRAME
Establish baseline	Conduct a physical audit of materials at each waste management facility to understand waste streams and volumes.	Council Service Managers	August 2023
Research and development	Develop template and procedures to conduct physical audit of waste management facilities.	LGANT	June 2023
	Investigate treatment options for materials received.	LGANT	Ongoing
	Investigate means of how to develop each waste management facility to safely store/treat waste.	Tiwi Islands Regional Council	Ongoing
Seek additional funding	Look at opportunities for funding for development of each waste management facility.	Grants Officer	Ongoing
Collaborate with waste management industry	Look for opportunities to work with waste industry to foster solutions for diversion of waste from the islands.	Tiwi Islands Regional Council	Ongoing
Data collection	Continue to collect data on a regular basis. Develop templates to assist in data collection.	Council Service Managers LGANT	Ongoing July 2023
Signage at each waste management facility	Design and installation of language appropriate signage to inform visitors of proper waste separation and disposal.	Tiwi Islands Regional Council	July 2023
Implement recycling	Staged approach according to priority and ease of programme.	Tiwi Islands Regional Council	Commencing July 2023
Education programmes	Develop resources to educate residents about waste initiatives on the Tiwi Islands	Tiwi Islands Regional Council	December 2023

Environmental Licence for Wurrumiyanga	Apply for licence and submit relevant documents to enable assessment.	Tiwi Islands Regional Council	December 2023
Kerbside collection	Make improvements to the collection of kerbside waste bins.	Tiwi Islands Regional Council	Ongoing
	Increase the capacity of staff that hold Heavy Vehicle licences.	Tiwi Islands Regional Council	Ongoing

GOAL 2: DEVELOP WASTE MANAGEMENT INFRASTRUCTURE

ACTIVITY	ACTION	RESPONSIBILITY	TIMEFRAME
Establish baseline	Conduct a physical audit of materials at each waste management facility to understand waste streams and volumes.	Council Service Managers	August 2023
Data collection	Continue to collect data on a regular basis. Develop templates to assist in data collection.	Council Service Managers	Ongoing
		LGANT	July 2023
Waste Management Facility site and management plan	Develop a site and management plan for each facility to identify where wastes are to be stored and how operations are conducted.	Tiwi Islands Regional Council and LGANT	July 2023
Upgrade each waste management facility	Identify infrastructure required to safely store materials and improve access to each facility	Tiwi Islands Regional Council	September 2023
Funding	Look for funding opportunities to allow for upgrades.	Grants officer	Ongoing
Environmental compliance	Work towards continuous improvement at each waste management facility to enable compliance with Environmental Legislation.	Tiwi Islands Regional Council	Ongoing
Improve resources	Work towards attracting and retaining suitably qualified staff.	Tiwi Islands Regional Council	Ongoing

GOAL 3: INITIATE KEY STAKEHOLDER ENGAGEMENT AND PARTNERING OPPORTUNITIES			
ACTIVITY	ACTION	RESPONSIBILITY	TIMEFRAME
Establish baseline	Conduct a physical audit of materials at each waste management facility to understand waste streams and volumes.	Council Service Managers	August 2023
Data collection	Continue to collect data on a regular basis. Develop templates to assist in data collection.	Council Service Managers LGANT	Ongoing July 2023
Identify business opportunities	Investigate means of collecting revenue from identified waste streams such as container deposit scheme.	Tiwi Islands Regional Council	Ongoing
Collaborate with industry	Work with industry to find solutions for waste streams.	Tiwi Islands Regional Council (LGANT to assist)	Ongoing
Funding opportunities	Seek out funding for infrastructure to store wastes and to assist with costs of sending materials for recycling	Grants officer	Ongoing
Signage	Design and installation of language appropriate signage to inform visitors of proper waste separation and disposal.	Tiwi Islands Regional Council	July 2023
Education programme	Develop resources to educate residents about waste initiatives on the Tiwi Islands	Tiwi Islands Regional Council	December 2023
GOAL 4: SUSTAINABLE WASTE MANAGEMENT PLAN			
ACTIVITY	ACTION	RESPONSIBILITY	TIMEFRAME
Establish baseline	Conduct a physical audit of materials at each waste management facility to understand waste streams and volumes.	Council Service Managers	August 2023
Data collection	Continue to collect data on a regular basis. Develop templates to assist in data collection.	Council Service Managers LGANT	Ongoing July 2023

Conduct cost/benefit analysis	Review if data considerations	External party	July 2024
Improve resources	Develop staff skill sets to fill in for other staff in times of absence. Improve physical capability of council and increase financial resources.	Tiwi Islands Regional Council	Ongoing
Review business opportunities	Investigate means of obtaining revenue from recyclable materials.	Tiwi Islands Regional Council	September 2023
Cost recovery	Make contractors accountable for paying for disposal at council waste management facilities	Tiwi Islands Regional Council	Immediately

OPPORTUNITIES

COMMUNITY EDUCATION AND ENGAGEMENT

To bring about improvement in waste management practices on the Tiwi Islands all communities need to be involved in the process. TIRC will be required to provide infrastructure and services to the community, but the community needs to drive solutions that work for them to ensure they have a sense of ownership and responsibility over waste management.

INDUSTRY SUPPORT

Private industry can assist the communities and TIRC with solutions to current waste management issues. TIRC have an agreement in place with Seaswift whereby the barge company provides free backloading of recyclable materials to Darwin and stores the material in their yard until it is collected by a local material processor.

Waste transporters could be engaged via contacting WRINT (Waste and Recycling Industry NT). Most major waste and recycling industry groups in the Territory have membership to this industry association and may be able to provide financially viable opportunities for the removal and treatment of difficult wastes from Tiwi Island communities.

The Tiwi Islands Training & Employment Board (TITEB) run the CDP programme on behalf of the Federal Government and offer several programmes. There is an opportunity for TIRC to engage this organisation to provide services to increase source separation of resources such as spare parts removal from abandoned vehicles prior to moving them to the laydown areas at landfill sites.

ORGANIC WASTE

The community of Wurrumiyanga has a market garden and Milikapiti has a farm and nursery with both organisations offering fresh fruit and vegetables for sale. Composting

organics will reduce waste volumes being disposed to landfill and become a valuable resource to the local community.

PRODUCT STEWARDSHIP SCHEMES

Access to Product Stewardship Schemes has historically been non-existent to remote communities although this does seem to be improving for many remote communities. The approved household battery product stewardship scheme commencing 1 July 2021, provides for rebates for NT councils which will enable participation in the scheme by Tiwi Islands Regional Council. Other product stewardship schemes that could be managed on the Islands are:

- MobileMuster
- National Television and Computer Recycling Scheme which is looking to expand its scope to include a greater range of electronic items such as dishwashers

ILLEGAL DUMPING

Illegal dumping is prevalent in remote communities and is undertaken by government contractors, local contractors and residents. Commercial operators that do dispose at the Waste Management Facility generally don't pay charges although these are set in Council's fees and charges which is available to the general public via the Council website. Some NT Government contracts have clauses that require their contractors to provide evidence of waste disposal receipts but is not consistent across all contracts. TIRC can work with local contractors to ensure they are aware of their obligations to pay council for use of their waste management facility.

Another possible solution to ensure that NT Government contractors pay for disposal is to blacklist them with local business when they dispose illegally. This would result in the contractor being unable to secure accommodation or purchase any goods including food and fuel while on the Tiwi Islands.

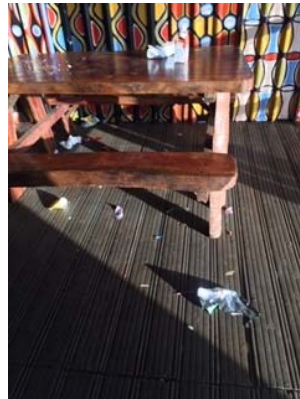


ILLEGAL DUMPING NEAR MILIKAPATI LANDFILL SITE

LITTER

Traditional methods of waste disposal relied on consuming natural materials that broke down in the environment for the good of the environment. Modern consumption materials however, rely on man-made products that when disposed in the traditional manner, doesn't break down readily becoming litter while potentially attracting pests and rodents. Community engagement will be undertaken with residents and other key stakeholders. This will include public education supported by community specific resources.

The below photo was taken outside a shop in Wurrumiyanga. Litter has been left on and near the tables despite three bins being available less than 3 metres away.



LITTER OUTSIDE SHOP IN WURRUMIYANGA

TIRC has an issue with litter created as a result of gambling activity in public places. The activity takes place near food outlets and consumption of food and beverages is evident in the litter left behind.



LITTER FROM GAMBLING ACTIVITY

HOW DO WE GET THERE

REPORTING BASELINE DATA

Baseline data is required to be able to measure the success of this waste management strategy. For example, cleaning up litter in Wurrumiyanga currently takes 2 staff 4 hours daily to complete. To measure the success of litter reduction it would be a matter of comparing how many staff and hours were involved in litter pickups at 3 month intervals after implementing reduction actions. The baseline data will need to be gathered by Tiwi Islands Regional Council to enable the measuring of success.

MEASURING SUCCESS

Success of the strategy will be measured through achievement of the set goals and activities within the agreed timeframes.

GOAL 1: IMPLEMENT BETTER PRACTICE WASTE MANAGEMENT

July 2023

TIRC aspires to implement better practice waste management in their communities to improve environment and public health. To implement this goal it will be necessary to understand the characteristics and volumes of waste being disposed at each of their waste management facilities. LGANT will develop a waste audit template for council staff to utilise.

Ongoing

Once waste streams and volumes are identified, solutions for each site can be investigated. Solutions will be determined by investigating opportunities for treatment of materials and funding opportunities. TIRC will need to work with industry to deliver on programmes that are developed as a result of the audit undertaken. Council will continue to collect data on a regular basis to monitor changes in waste types and/or volumes.

- Kerbside collection service has improved.
- Increase number of staff that hold a Heavy Vehicle Licence

July 2023

- Signage is installed at each waste management facility.
- Recycling has commenced.
- Templates have been developed to assist staff in data collection.

December 2023

- Resources have been developed to allow an education programme to be rolled out.
- Environmental Licence for Wurrumiyanga has been applied for.

GOAL 2: DEVELOP WASTE MANAGEMENT INFRASTRUCTURE

July 2023

A site plan has been developed to identify how wastes are to be separated and stored. A management plan has been developed to guide staff on how to operate the site.

August 2023

Obtaining baseline data on material type and volumes is critical to measure the success of this goal. LGANT has provided TIRC a template and procedures to enable staff to conduct audits at each of their waste management facility.

September 2023

Infrastructure needs have been identified to safely store materials and improve access to facilities.

Ongoing

- Working toward continuous improvement to achieve compliance with environmental legislation.
- Investigate funding opportunities.
- Staff resources have improved.

GOAL 3: INITIATE KEY STAKEHOLDER ENGAGEMENT AND PARTNERING OPPORTUNITIES

July 2023

- Signage has been installed at each site to inform visitors of correct waste disposal.

August 2023

- Baseline data has been obtained.

December 2023

- Resources have been developed to enable an education programme to be rolled out.

Ongoing

- Data is collected on a regular basis.
- Revenue opportunities from waste streams have been identified.
- TIRC are working with industry to find solutions for waste streams on the island.
- Funding is being sought to establish infrastructure to assist with storing and sorting materials.

GOAL 4: SUSTAINABLE WASTE MANAGEMENT PLAN

Immediate

- Contractors are paying for disposal at waste management facilities.

August 2023

- Baseline data has been obtained.

September 2023

- Means of obtaining revenue from recyclable materials has been identified.

July 2024

- A cost/benefit analysis of baseline data has commenced by an external party.

Ongoing

- Regular data collection is being undertaken by staff.
- Staff are being skilled in multiple roles to allow for key roles to be continuously resourced.

REVIEW

For the first two years the strategy is to be reviewed on a quarterly basis and updated as required. Failure to meet timeframes will need to be evaluated in terms of why they haven't been met and to be extended as practicable. After this time the strategy can be reviewed on an annual basis.

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