



CNMI Inter-Island Solid Waste Management Taskforce (ISWMT)

**COMPREHENSIVE INTEGRATED SOLID WASTE
MANAGEMENT PLAN FOR THE COMMONWEALTH
OF THE NORTHERN MARIANA ISLANDS**



Public Hearing

Agenda

Introduction

Priority Projects & Programs

Overview of Chapters

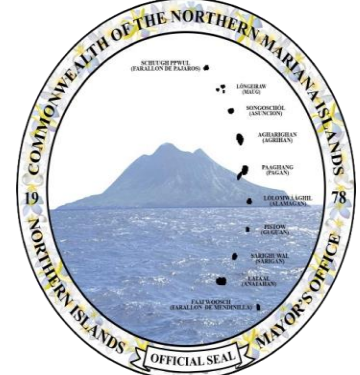
Next Steps

Q&A

INTRODUCTION



Inter-Island Solid Waste Management Taskforce (ISWMT)



Goal: Divert 50% of waste by 2030

12 RESPONSIBLE CONSUMPTION AND PRODUCTION





PRIORITIES

Additional Supplementary Appropriations for Disaster Relief Act





MARPI LANDFILL

- **Complete field survey, biological assessment, & informal Environmental Species Act (ESA) Section 7 consultation for land clearing of Cell 3**
- **Initiate construction of Cell 3**
- **Hire & train personnel**



PUNTAN DIABLO DUMP

- **Close Dump**
- **Design, permit, & construct Small Community Exempt Landfill (SCEL)**
- **Procure equipment**
- **Hire & train personnel**



TATACHOK DUMP

- **Close Dump**
- **Design, permit, & construct Small Community Exempt Landfill (SCEL)**
- **Procure equipment**
- **Hire & train personnel**



NORTHERN ISLANDS

- **Identify potential site & contingency site for Small Community Exempt Landfill (SCEL)**
- **Assess site**
 - **If designated site does not meet requirements, assess contingency site for potential SCEL**

CNMI-WIDE PROGRAMS

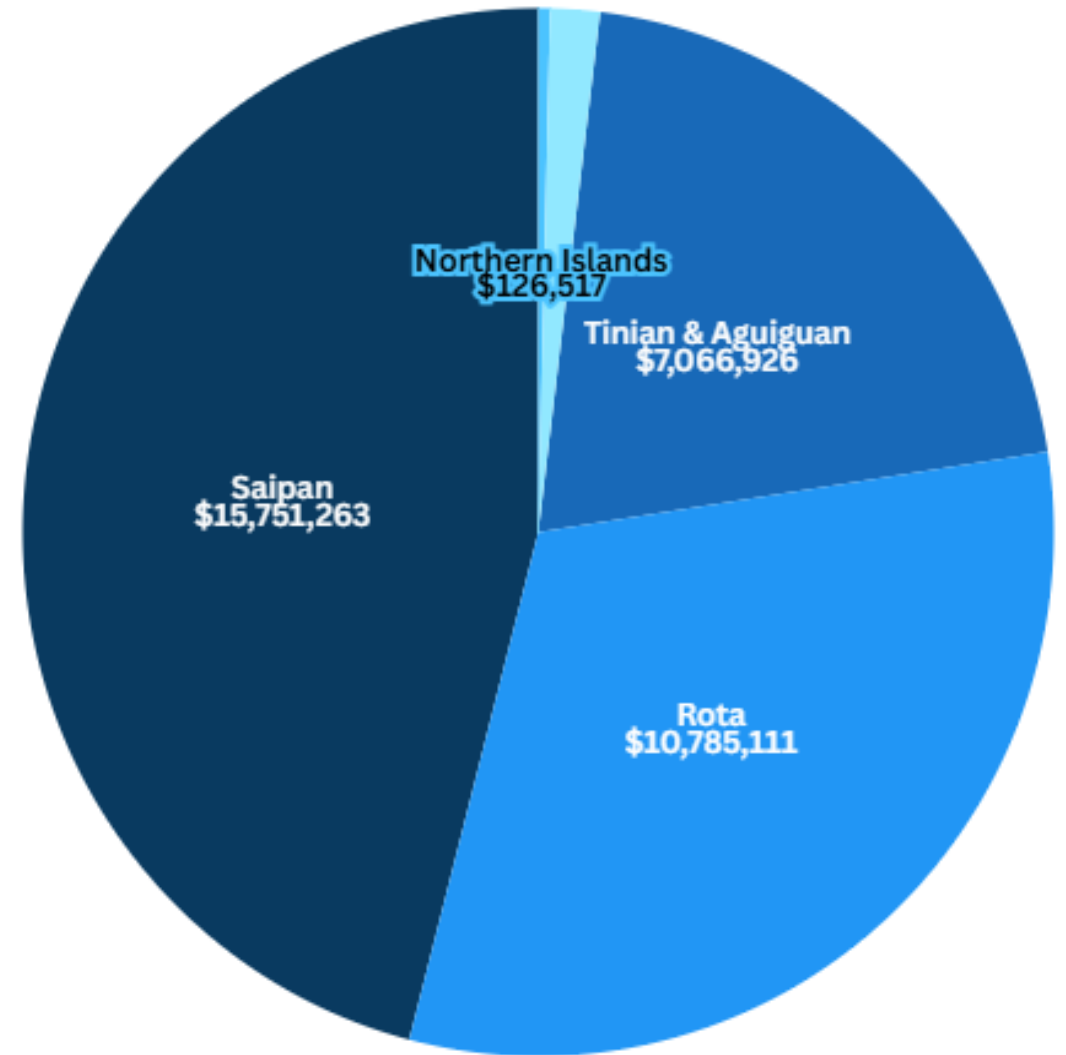
- **Developing & updating landfill disposal fees**
- **Increasing recycling & composting rates**
- **Developing & implementing Advanced Disposal Fee (ADF) Program**
- **Updating policies**
- **Enhance public education & outreach**



ASADRA Priorities

- **Marpi Landfill**
 - Complete field survey, biological assessment, & informal ESA Section 7 consultation for land clearing of Cell 3
 - Initiate construction of Cell 3
 - Hire & train personnel
- **Puntan Diablo Dump**
 - Close Dump
 - Design, permit, & construct SCEL
 - Procure equipment
 - Hire & train personnel
- **Tatachok Dump**
 - Close Dump
 - Design, permit, & construct SCEL
 - Procure equipment
 - Hire & train personnel
- **Northern Islands Site Assessment**
- **CNMI-wide Programs**

Estimated Costs (Inflated)



**Solid
Waste
Infrastructure
For
Recycling Grant Program**



SAIPAN

- **Cardboard Shredder**
 - Includes supply, delivery, commission, testing, & utility hook-ups



TINIAN & AGUIGUAN

- **Baler**
 - Includes supply, delivery, commission, testing, & utility hook-ups



ROTA

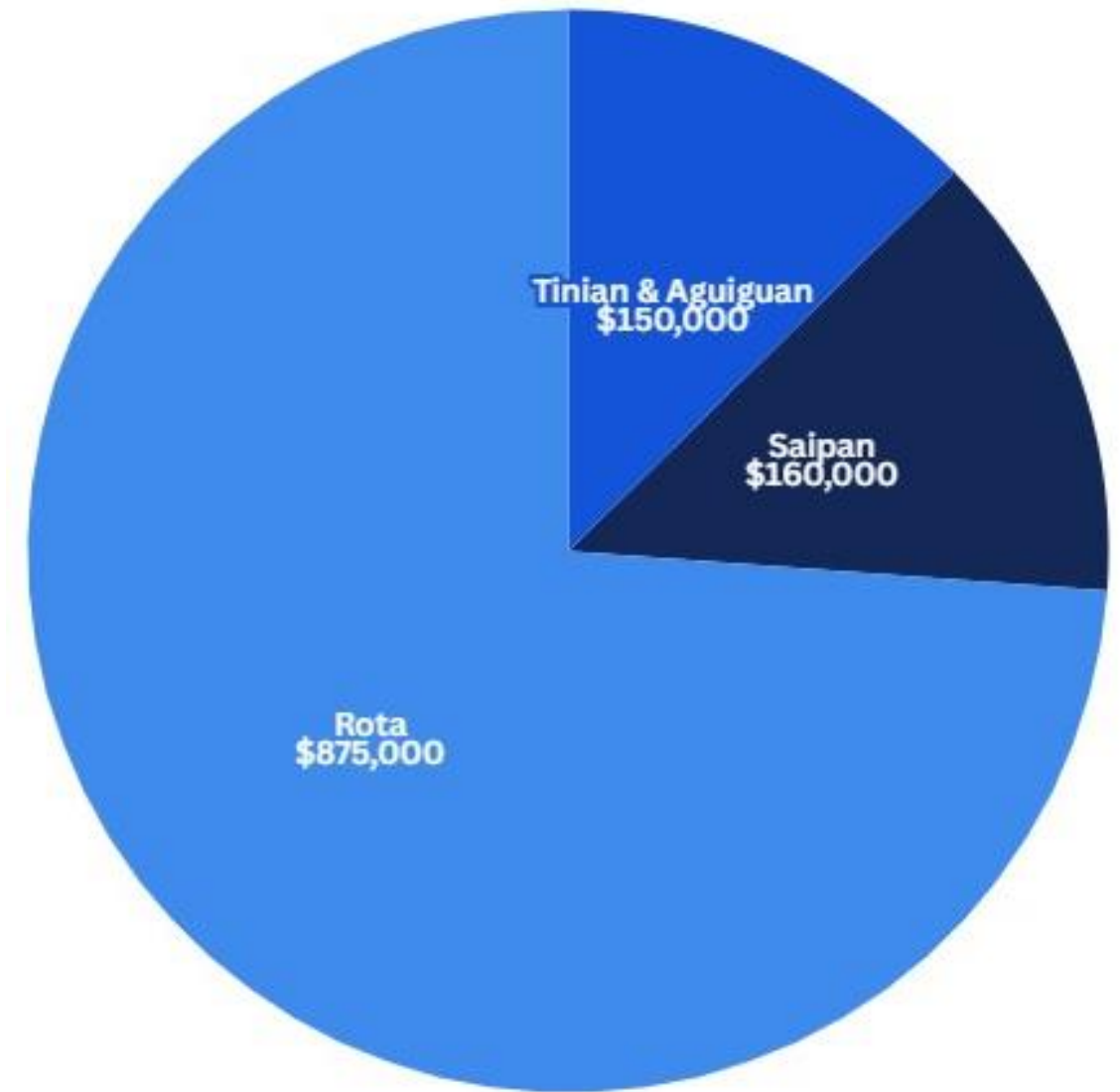
- **Baler**
 - Includes supply, delivery, commission, & testing
- **Baler building**
 - Site assessment & design
 - Construction & CM
 - Includes utility hook-ups



SWIFR Priorities

- **Saipan**
 - Cardboard shredder
- **Tinian & Aguiguan**
 - Baler
- **Rota**
 - Baler (~\$150K)
 - Baler building (~\$725K)
 - Site assessment & design (~\$150K)
 - Construction & CM (~\$575K)
 - Includes electrical, water, & utility hook-ups

Estimated Costs



Other Funding Sources

Saipan



Marpi Landfill

Procure equipment
Design & install Solar PV
& BESS, and back-up
generator
Hire/designate & train
personnel



Kagman Organics Processing Site

Procure equipment
Hire & train personnel
Assess, design, permit, &
construct site



LBRTS & MRF

Rehabilitation
Procure equipment
Prepare & ship
commodities
(backlogged materials)
Identify contractor for
recycling/materials
recovery operations



As Gonno CCC

Construct with required
furnishings
Hire & train personnel



Kagman CCC

Construct with required
furnishings
Hire & train personnel



Hardfill

Conduct feasibility study

Tinian & Aguiguan



Green Waste & Composting Facility

- Procure equipment
- Initiate site improvements
- Designate & train personnel
- Conduct feasibility study for composting & biogas production



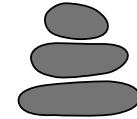
Tinian Recycling Center

- Construct storage facility for recyclables
- Construct metal processing facility
- Procure equipment



Atgidon Landfill

- Review previous design
- Project assessment
- Design & construction
- Procure equipment



Hardfill

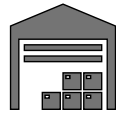
- Conduct feasibility study

Rota



Tatachok SCEL

Procure additional equipment



Metal Processing Facility

Hire & train personnel



Green Waste & Composting Facility

Initiate site improvements

Procure equipment

Hire & train personnel



Environmental Education Center

Sewerage & septic system
(labor & materials) incl.
percolation test

Permit & construct

Procure equipment

Hire & train personnel



CCC

Design, permit, & construct

Procure equipment

Hire & train personnel

Northern Islands



SCEL

Design, permit, & construct

Procure equipment

Designate & train personnel

CHAPTER OVERVIEW



Ch. 1: Executive Summary

Vision and Mission

Goals & Objectives

- **Waste Reduction/Diversion**
- **Collection & Transport**
- **Disposal**
- **Management**
- **Public Outreach and Education**
- **Waste Generation**

Lead Agencies/Departments

Planned Project – Next Five Years

Capital & Operational Improvement Priority Projects

- **ASADRA priority projects & programs**
- **Inflated cost estimates**
- **Timeline**

Inflated Cost Estimates

	FY 2026		FY 2027		FY 2028		FY 2029		FY 2030		Total
	Equipment/ Land Acquisition/ Contracted Services	O&M and Labor	Equipment/ Land Acquisition/ Contracted Services	O&M and Labor	Equipment/ Land Acquisition/ Contracted Services	O&M and Labor	Equipment/ Land Acquisition/ Contracted Services	O&M and Labor	Equipment/ Land Acquisition/ Contracted Services	O&M and Labor	
CNMI-Wide	\$ 171,666	\$ -	\$ 176,833	\$ -	\$ 182,166	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 530,665
Saipan	\$ 4,935,931	\$103,195	\$5,057,433	\$106,300	\$5,209,966	\$109,506	\$ -	\$112,813	\$ -	\$116,119	\$15,751,263
Tinian	\$ 2,508,050	\$237,851	\$ 787,792	\$245,010	\$ 811,552	\$252,399	\$ 836,055	\$260,020	\$ 860,557	\$267,640	\$ 7,066,926
Rota	\$ 4,271,487	\$237,851	\$1,698,475	\$245,010	\$1,749,701	\$252,399	\$1,802,528	\$260,020	\$ -	\$267,640	\$10,785,111
Northern Islands	\$ 20,600	\$ -	\$ 21,220	\$ -	\$ 21,860	\$ -	\$ 22,520	\$ 8,445	\$ 23,180	\$ 8,692	\$ 126,517
Yearly Total Estimates (with inflation)	\$11,907,734	\$578,897	\$7,741,753	\$596,320	\$7,975,245	\$614,304	\$2,661,103	\$641,298	\$ 883,737	\$660,091	\$34,260,482
Yearly Total Estimates combined (with inflation)	\$ 12,486,631		\$ 8,338,073		\$ 8,589,549		\$ 3,302,401		\$ 1,543,828		

Timeline

			Estimated Duration (Months)																			
Island	Site	Project	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
Saipan	Marpi Landfill	Complete Field Survey, Biological Assessment, & Informal ESA Section 7 Consultation for Land Clearing of Cell 3																				
		Initiate Construction of Cell 3																				
		Hire & Train Personnel																				
Tinian	Puntan Diablo	Design, Permitting, & Construction																				
		Procure Equipment																				
		Hire & Train Personnel																				
Rota	Tatachok Disposal Site	Assessment, Design, Permitting, & Construction																				
		Procure Equipment																				
		Hire & Train Personnel																				
NI	Pagan SCEL	Assessment																				

Ch. 2: Introduction

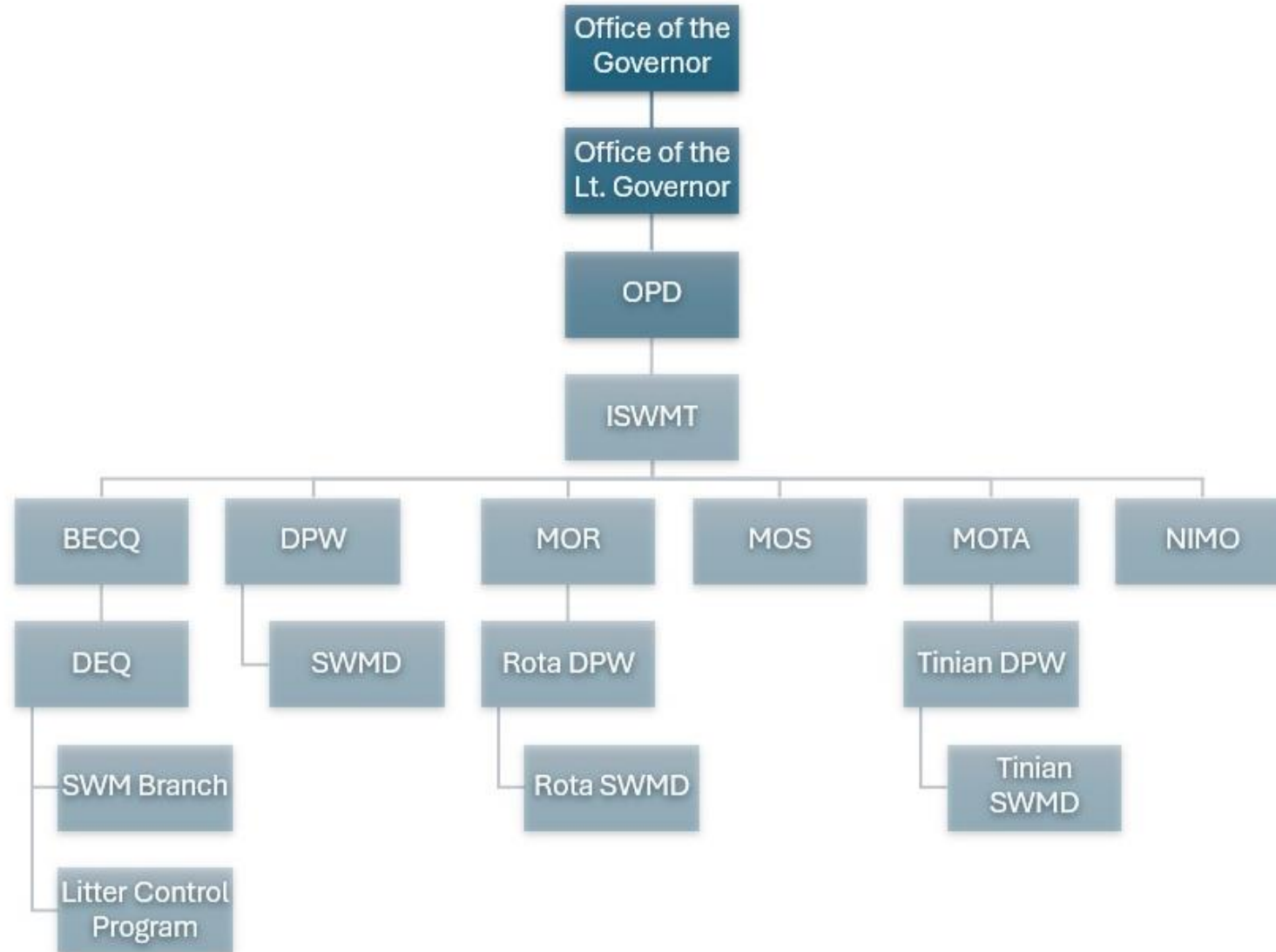
Demographics

Plan Purpose

- **Environmental Protection**
- **Public Health**
- **Regulatory Compliance**
- **Economic Efficiency**

Plan Objectives

Implementing Agencies



Ch. 3: Existing SWM System

Regulatory and Oversight System for Solid Waste

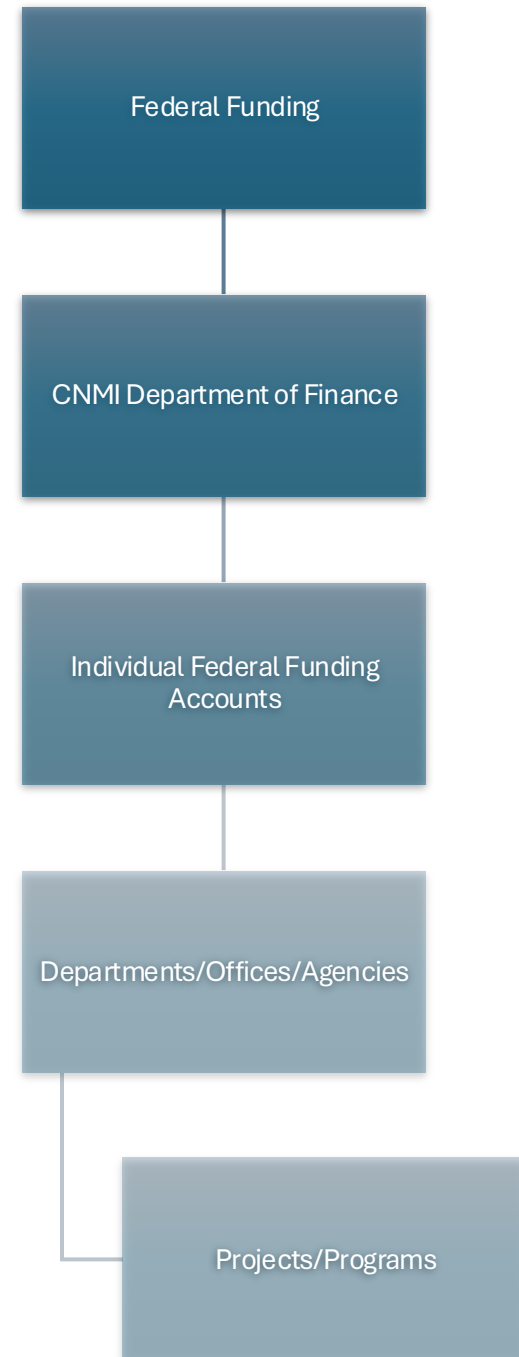
- **BECQ DEQ Solid Waste Management Branch**
- **BECQ DEQ Litter Control Program**
- **Advanced Disposal Fee (ADF) Program**

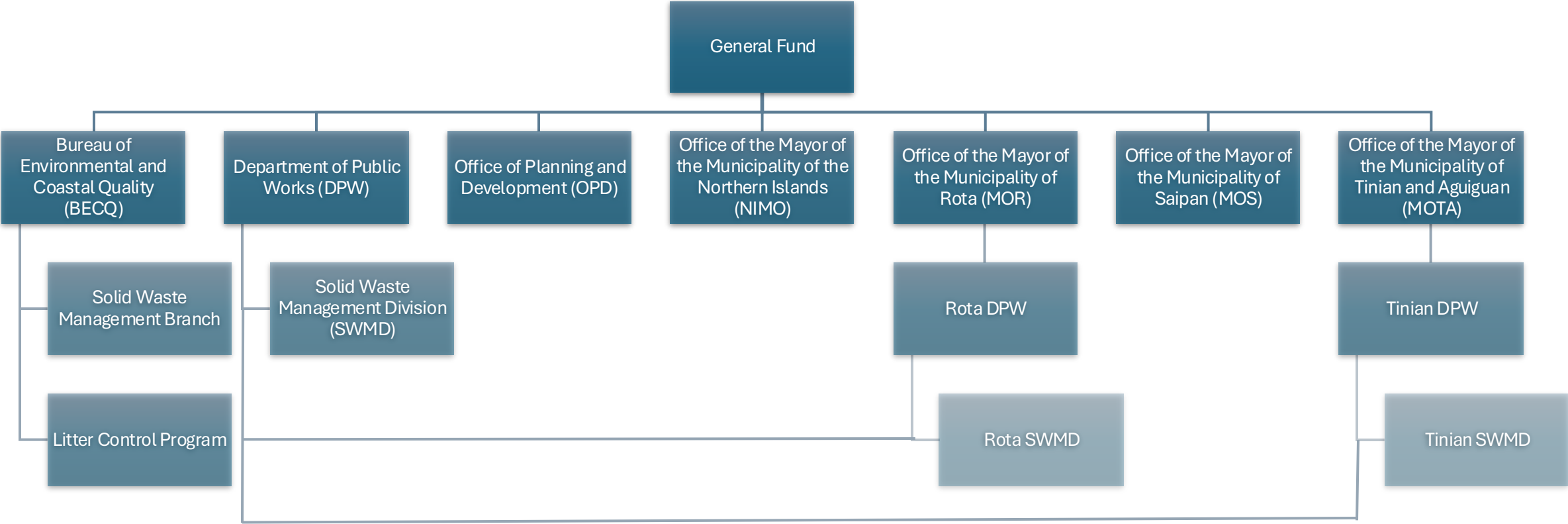
Ch. 3: Existing SWM System

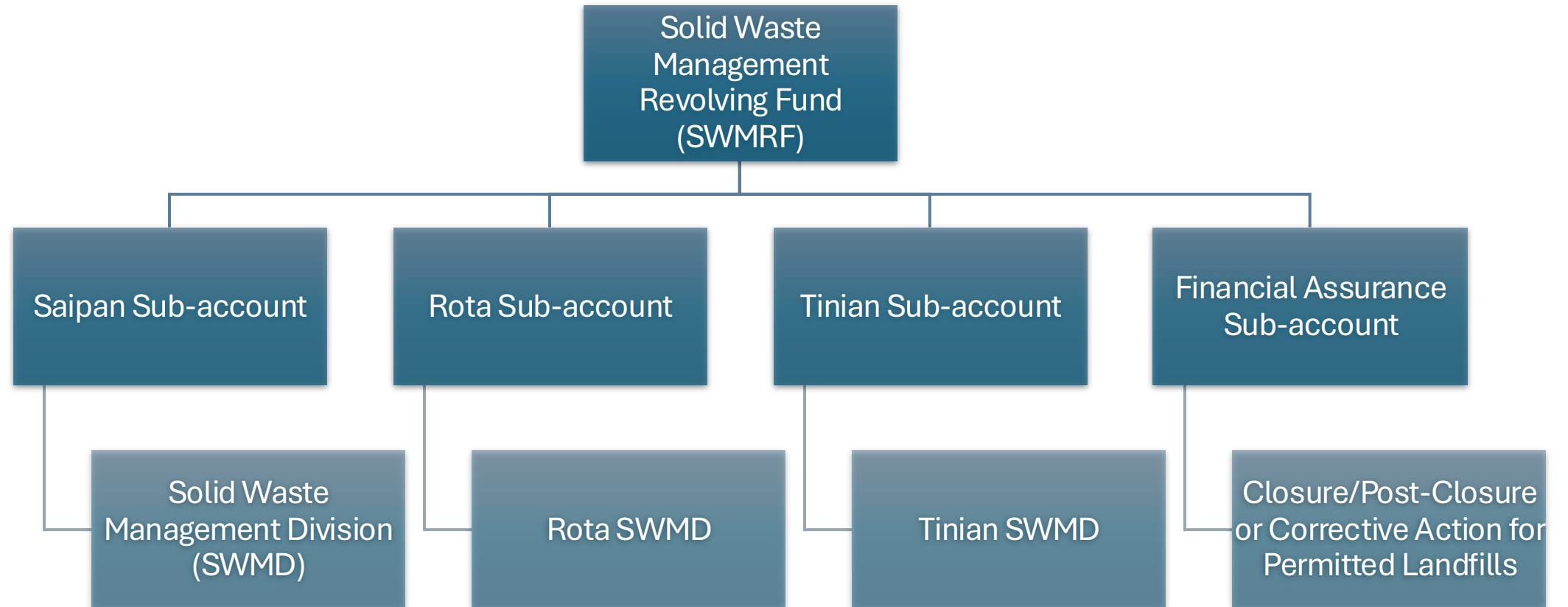
Infrastructure, Collection Methods, & Disposal Facilities

- **Saipan**
 - Lower Base Refuse Transfer Station (LBRTS) & Material Recovery Facility (MRF)
 - Marpi Landfill
 - Kagman Organics Processing Facility
 - Port Facilities
- **Tinian & Aguiguan**
 - Tinian Recycling Center
 - Puntan Diablo Dump
 - Green Waste & Composting Facility
 - U.S. DoD Solid Waste Management Projects
- **Rota**
 - Tatachok Dump
 - Green Waste & Composting Facility
- **Northern Islands**
 - Pagan
 - Alamagan
 - Agrihan

Financial Management





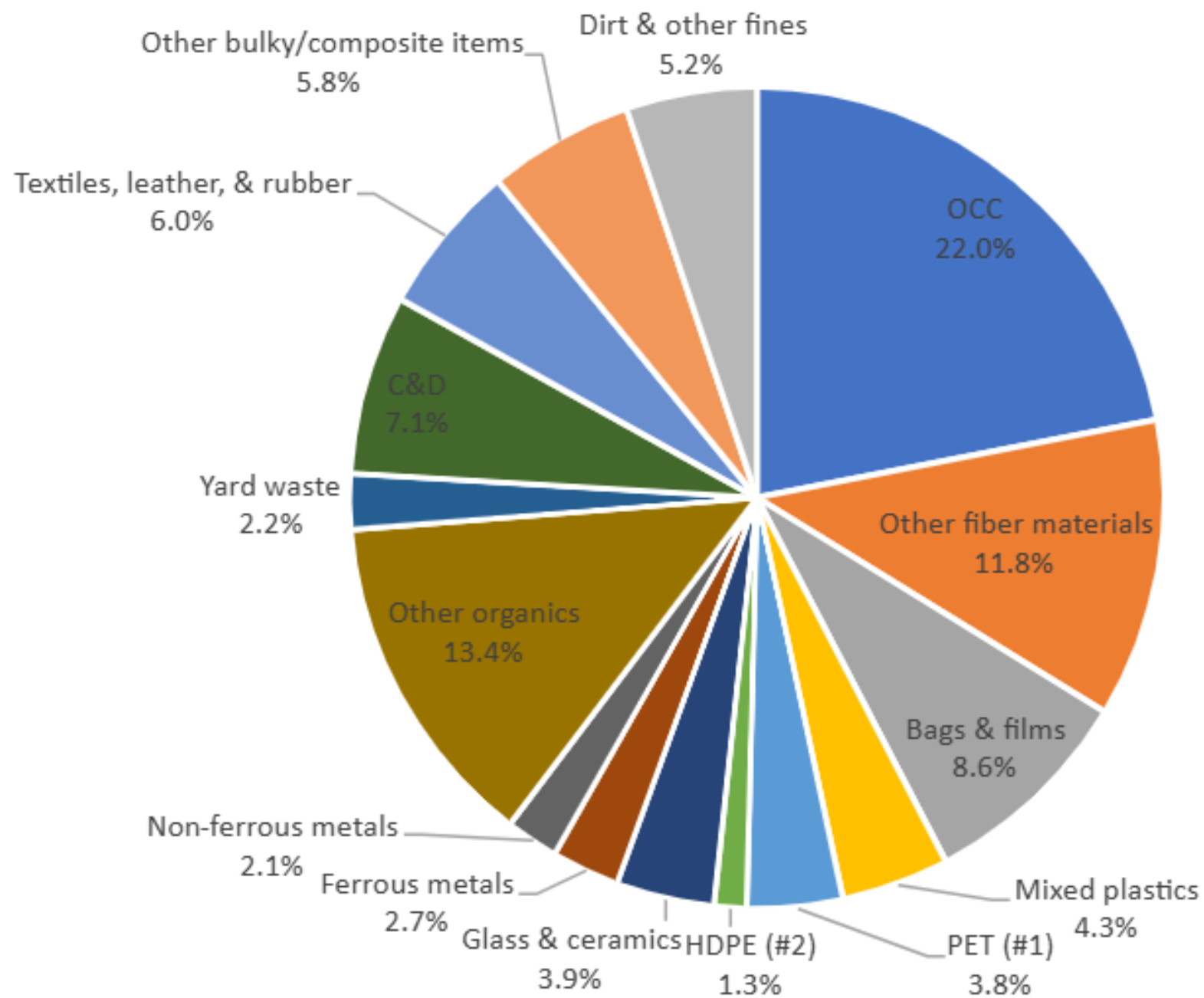


Ch. 4: Waste Streams Composition & Data

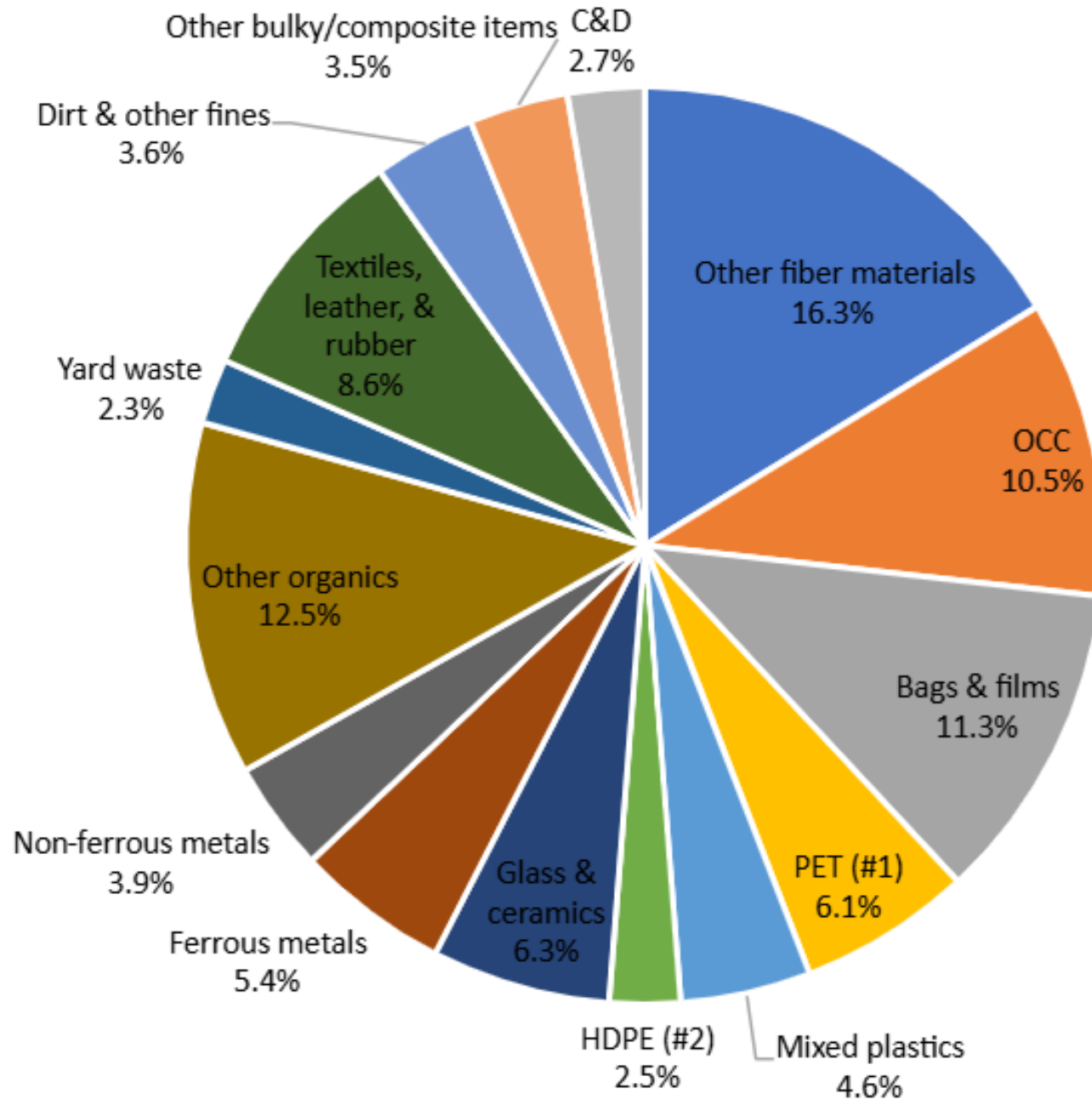
Waste Characterization Study

- **15 different material categories**
 - **Fiber**: Cardboard, paper products, & etc.
 - **Plastic**: Plastic bottles, Plastic bags, & etc.
 - **Glass**: Glass bottles, ceramics, & etc.
 - **Metals**: Ferrous and non-ferrous
 - **Organics**: Green waste, food, wood, & etc.
 - **Other**: Construction & demolition (C&D) debris, furniture, household appliances, electronic waste (e-waste), & etc.

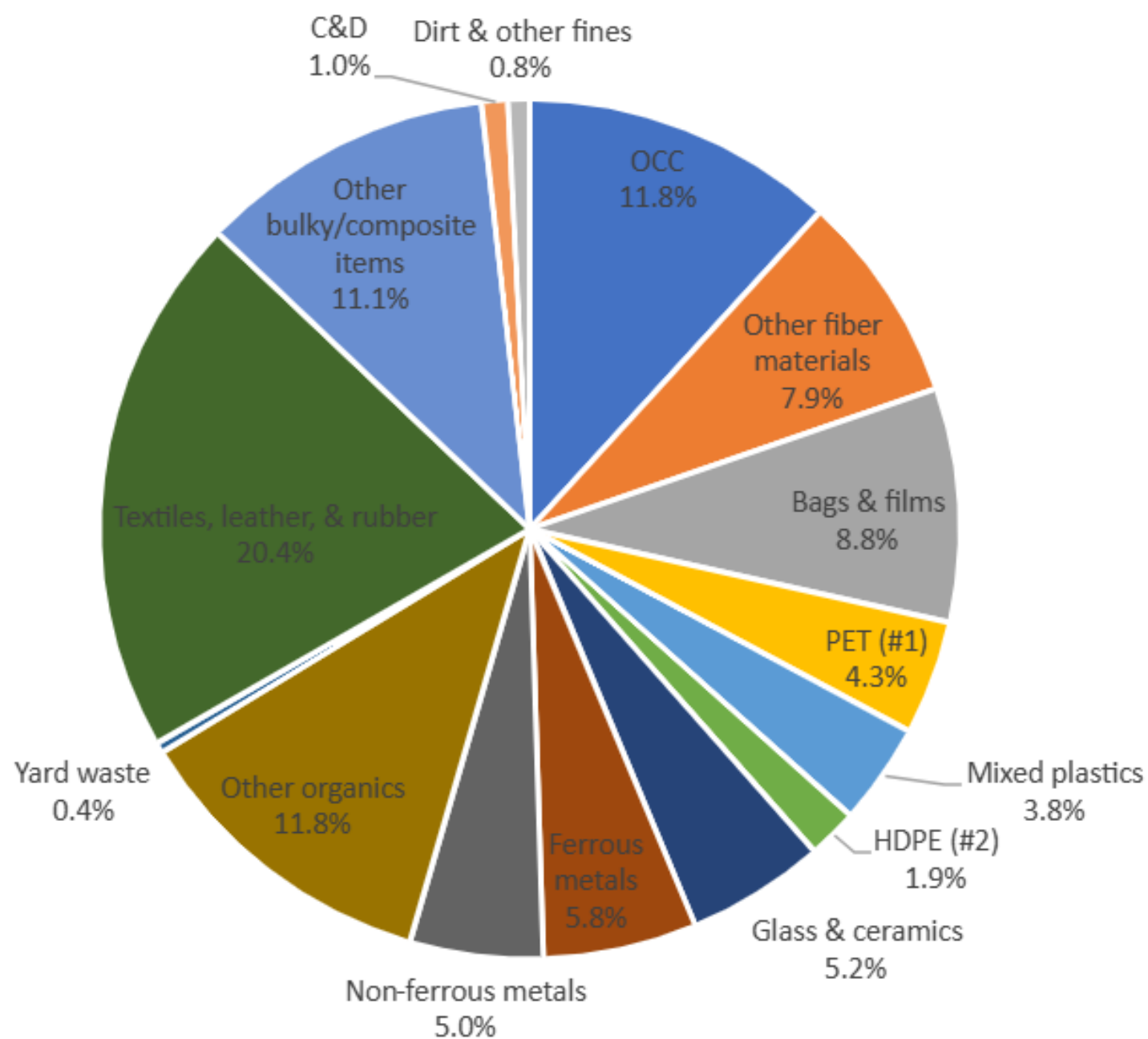
Saipan Waste Characterization Study Results



Tinian Waste Characterization Study Results



Rota Waste Characterization Study Results



Ch. 4: Waste Streams Composition & Data

Projections (in tons per year, or TPY)	
Saipan	30,044
Tinian & Aguiguan	683
Rota	639
Northern Islands	2.4

Ch. 5: Solid Waste Management Goals & Objectives

Goals

- **To protect the environment and human health;**
- **To enhance the efficiency and economic management of the CNMI's waste collection and disposal processes;**
- **To emphasize sustainable practices, public engagement, and regulatory compliance throughout the CNMI; and**
- **To establish a resilient solid waste management infrastructure tailored to the unique needs of the CNMI.**

Ch. 5: Solid Waste Management Goals & Objectives

Objectives

- **Collection & Transport**
- **Waste Reduction/Diversion**
- **Disposal**
- **Management**
- **Public Education & Outreach (PE&O)**
- **Waste Generation**

Ch. 6: Collection & Transport

Ensure Regulatory Compliance

- **Environmental Regulations**
- **Residential, Commercial, and Government Waste**
- **Development Opportunities**
 - Tipping fees
 - ADF Program
- **Improvements**
 - Environmental Beautification Tax
 - Capacity building

Ch. 7: Waste Stream Reduction/ Diversion

Diversion Activities

- **Saipan**
 - Residential & commercial waste segregation
 - Rehabilitating LBRTS & MRF
 - Processing backlogged recyclable materials
 - Citizens Convenience Centers (CCCs)
 - As Gonno
 - Kagman
 - Hardfill
 - Kagman Organics Processing Facility

Ch. 7: Waste Stream Reduction/ Diversion

Diversion Activities

- **Tinian**
 - Enhanced PE&O
 - Landfill disposal bans
 - Storage facility for recyclable materials
 - Composting & mulching
 - Feasibility study for composting & biogas production
 - CNMI-wide plastic bag ban
 - Tinian Zero Waste Plan

Ch. 7: Waste Stream Reduction/ Diversion

Diversion Activities

- **Rota**
 - Curbside garbage collection program
 - *Na'Gatbo Luta* waste separation program
 - Zero waste management plan
 - Green waste reintegration program

Ch. 7: Waste Stream Reduction/ Diversion

Create local green job opportunities

**Engage & educate community
members on proper waste
reduction/diversion practices**

Ch. 8: Disposal

Address illegal dumping

- **Improve existing landfill operations**
- **Upgrade open dumps to engineered landfills**
 - Close smaller open dumps
- **Implement landfill disposal bans**
 - Phased-in approach for each waste stream
 - Consider input from community sectors
- **Emphasize sustainable practices, public engagement, & regulatory compliance**
- **Establish resilient solid waste management infrastructure tailored to the unique needs of the CNMI**

Ch. 9: Management

Promote environmental stewardship

- Ensure adequate staffing levels
- Provide ongoing training for personnel
- Establish a system for regular assessment & improvement of waste management practices

Ch. 10: Public Outreach & Education

Develop & implement a comprehensive outreach & education program

- **Create opportunities for community participation in waste management decision-making processes**
- **Increase public awareness of acceptable waste management practices**
- **Encourage opportunities for community participation in waste reduction & recycling activities**
- **Encourage community participation in monitoring & reporting illegal dumping**
- **Timeline & Desired outcomes**

Ch. 11: Waste Generation & Diversion Measurement

Develop, understand, & implement protocols and logistics for measuring the CNMI's recycling rate

- **Procure new scales for SWMFs**
 - Helps with ADF program
- **Work with BECQ to obtain data from public & private operators**
 - Reused materials
 - Recycled materials
 - Organic waste (e.g., food waste, yard waste)

Ch. 12: Emerging Wastes

Managing Lithium-ion batteries

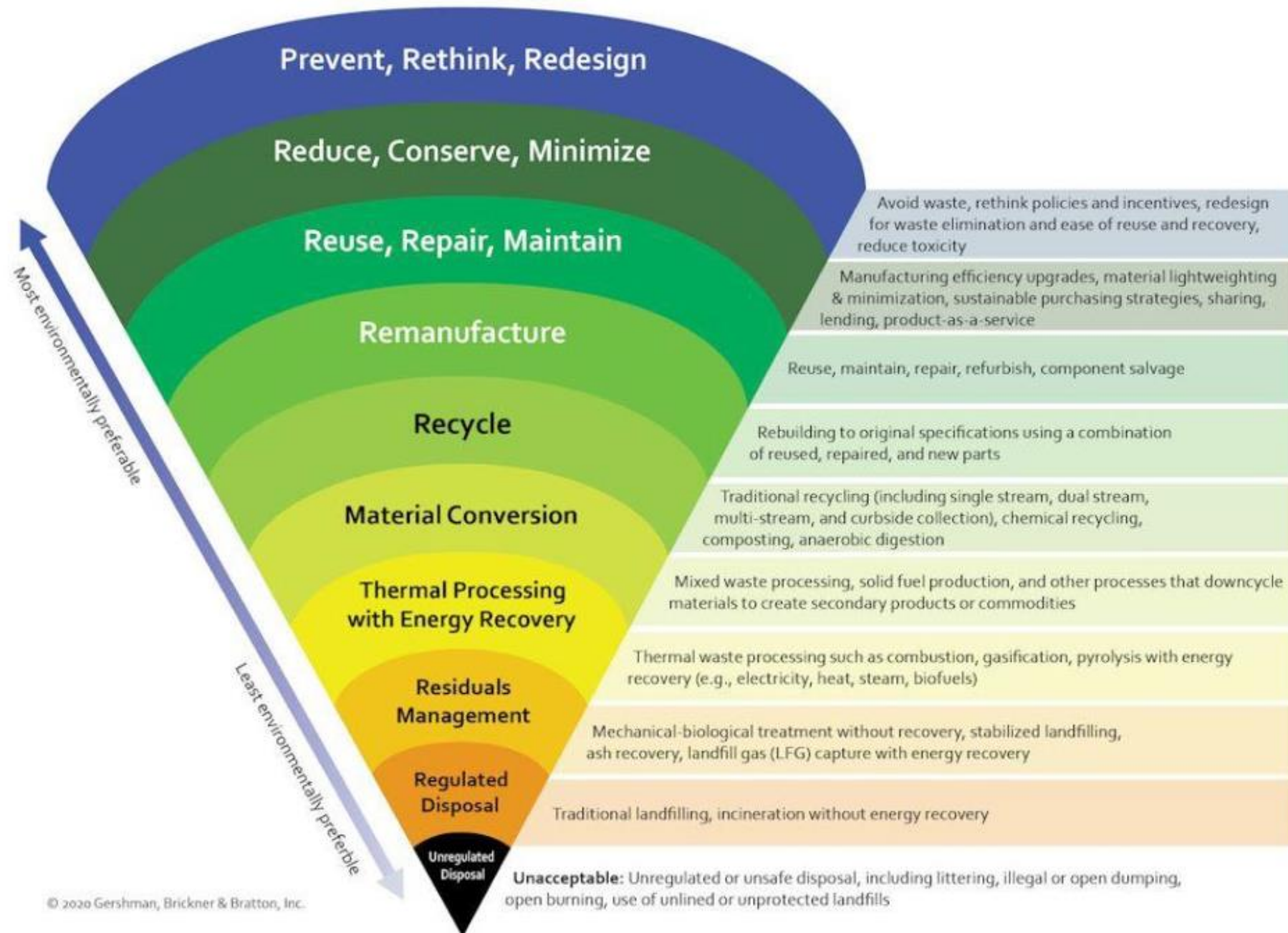
- **Background**
- **Resources**
- **Emergency response operations & tactics**
- **Identification**
- **De-energizing, air monitoring, & site cleanup**
- **Transport & disposal**
- **Environmental protection**
- **Public education & outreach**

Ch. 13: Getting to Zero Waste

Zero Waste Definition

"The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging and materials without burning and with no discharges to land, water, or air that threaten the environment or human health"

Sustainable Materials Management Hierarchy



Ch. 13: Getting to Zero Waste

Zero Waste Policies & Bans

- **Implement mandatory material recovery**
- **Implement bans on single-use plastic items**
- **Implement government green & sustainable purchasing policy**
- **Tax incentives & Preferred purchasing policies**
- **Awards & competition programs**
- **Zero waste training**

Ch. 13: Getting to Zero Waste

Tinian Zero Waste Plan

- **Goal: Divert/reduce top waste streams**
 - \$3.9M short-term (1-3 yrs)
 - \$1.3M mid-term (4-5 yrs)
 - \$3.6M long-term (6-10 yrs)
- **Foundational elements**
 - Strong governance
 - Sustainable funding
 - Public education & outreach
 - Monitoring, measuring, & reporting
 - Infrastructure development

Ch. 14: Recommendations

CNMI-Wide

- **Financial Management**
 - Establish a solid waste authority
 - Funding
 - Use full-cost accounting principles for management
 - Setting comprehensive, equitable rates
 - Restore the excise tax set aside
 - Establish appropriate reserves
 - Collection service
 - Leverage public-private partnerships (PPPs)
- **General Infrastructure**
- **Alternative waste diversion programs**
- **Summary of priority list recommendations**

Ch. 14: Recommendations

Island-Specific

- **Business tax rates**
- **Potential exemptions & incentives requiring statutory intervention**
 - Export exemption
 - Nonprofit organizations
 - Free trade zone
- **Size-based considerations**



A nominal SWPF that funds waste reduction programs & facility access; a competitive fee for collection is stable & equitable

A solid waste authority that is isolated from politics and prioritizes conservation of LF space

Convenient curbside service that reduces litter and dumping at a stable and stable price

New and expanded programs and materials to reduce waste at LBTS that are convenient and even a little fun

Creative use of space and ban on cardboard at Marpi Landfill, which conserve capacity and aid the economics of recycling



Ch. 15: Measuring Success

- **Waste diversion evaluation**
- **Facilities development & outreach**
- **Short- to mid-term benchmarks**
- **Revisions at least every 3 yrs**

Ch. 16: Potential Funding Sources

- **SWIFR Grant Program**
- **Consumer Recycling Education and Outreach Grant Program**
- **Pollution Prevention Grants**
- **Other Federal & Private Funding Sources**

Appendices

- **A: CNMI-Specific Tax Information & Incentives for Recycling Companies**
- **B: Pending Projects**
- **C: Permitted Facilities**
- **D: Open Dump Inventory**
- **E: ISWMT Directory**

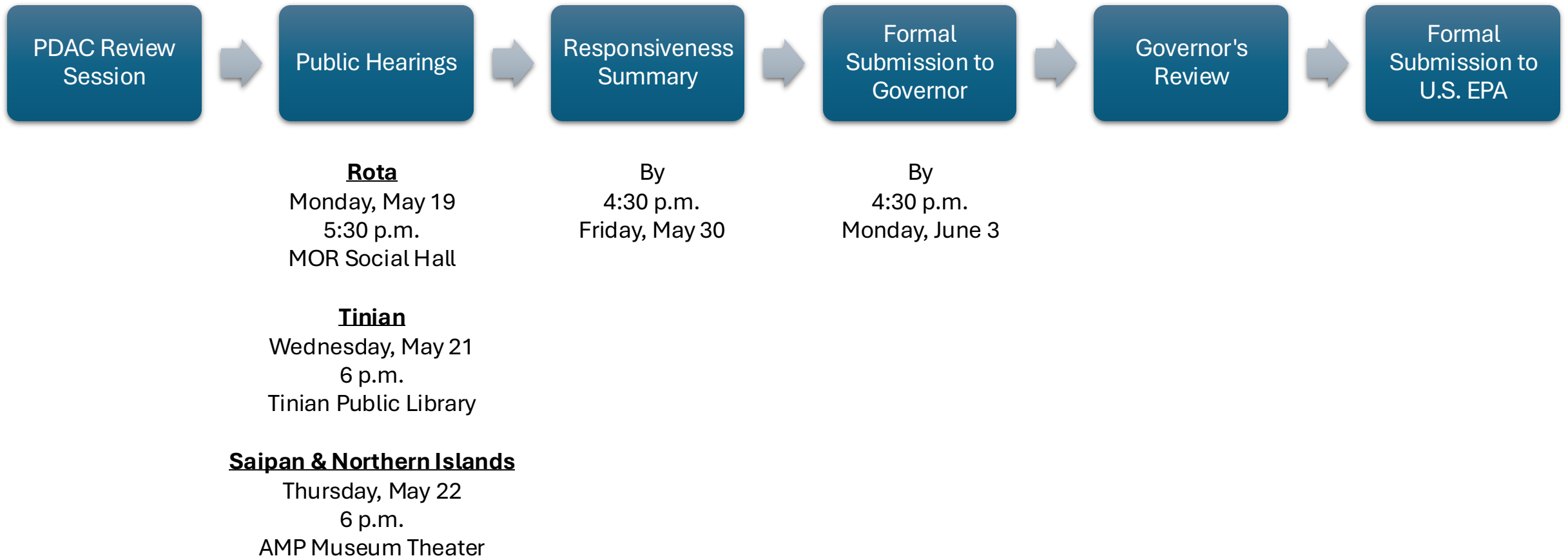
Closing

- **Glossary**
- **References**



NEXT STEPS

Next Steps





**Public comments are due by
11:59 p.m. on Sunday, May 25, 2025 CHST**

via

CISWMP Info Hub

opd.gov.mp/ciswmp.html

or

Email OPD Communications Specialist Joshua Santos

jg.santos@cnmi.gov





THANK YOU SI YU'US MA'ÅSE GHILISOW

Q&A





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