

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION



IN THE MATTER OF:) GSWA Docket 19-01
MSW Consultants' Final PUC)
Management Audit of GSWA) **ALJ REPORT**

)

INTRODUCTION

1. This matter comes before the Guam Public Utilities Commission ["PUC"] upon the submission by MSW Consultants ["MSW"] of the Final PUC Management Audit of the Guam Solid Waste Authority ["GSWA"].¹
2. In Public Law 34-058: 3, enacted on November 1, 2017, the Guam Legislature added 10 GCA § 51A119, which required the Guam Public Utilities Commission to perform a management audit of the existing operations of the Guam Solid Waste Authority.
3. On July 25, 2019, the PUC approved the Final Proposal of MSW Consultants for the conduct of the Management Audit of GSWA, the Management Audit schedule, and a budget of \$278,400.²
4. MSW proceeded with the project in August 2019.
5. In this proceeding, the PUC is now addressing the issue of whether the MSW Final Report should be adopted as the PUC Management Audit, in accordance with 10 GCA § 51A119.

BACKGROUND

6. Copies of the Final Report of MSW, as updated, have been provided to the PUC Commissioners, and the Report has been filed in this Docket.
7. In November 2019, three MSW consultants, Steve Lynch, Walt Garrison, and Don Grigg, visited Guam for approximately one week to conduct the necessary

¹ MSW Consultants Final Report, Management Audit of the Guam Solid Waste Authority, submitted on October 23, 2020.

² PUC Order, GSWA Docket 19-01, dated July 25, 2019.

- investigation, onsite inspections, and meetings with officials of GSWA and the PUC.
8. MSW had originally contemplated that it would make two more trips to Guam for the project; however, the Second Working Meeting and the Final Meeting and Presentation, scheduled for this year, had to be cancelled due to the corona virus pandemic.
 9. MSW was able to complete the Report through email communications, by conducting online discussions with GSWA officials, the ALJ, and PUC Commissioners, and by coordinating with the parties as to issues which needed resolution, prior to the completion of the Report.
 10. On October 21, 2020, MSW conducted an online presentation of its Report with members of the PUC. PUC Commissioners were provided copies of the Report in advance of the presentation and had a full opportunity to question MSW representatives concerning the Report.
 11. A copy of the MSW presentation is attached hereto as Exhibit "1". The presentation provides a good summary of the major findings and recommendations of MSW.

ANALYSIS

12. The Management Audit Scope adopted by the PUC contained five major tasks: (1) an examination of the GSWA facilities and baseline assessments of the Collection System, the Transfer Stations, and the Landfill; (2) Evaluation of Current Rate Structure, a cost of service study, and a determination made if the current rate structure is sufficient to meet the needs of GSWA; (3) Comparative Analysis of Manpower and Staffing, to meet the requirements of the Ratepayer Bill of Rights, 12 GCA §§ 12102.1 through 12102.2, which require the PUC to conduct a study comparing the staffing pattern and manpower levels of GSWA to the staffing patterns and manpower levels of at least (4) utilities in the United States Mainland; (4) Evaluation of Current Management Practices and Capabilities of GSWA, and whether such practices are in accord with industry best management practices; and (5) preparation and presentation of a final report.

13. The Final Report of MSW fully addresses each of the five tasks required in the Scope of Work. It contains detailed and appropriate information on the issues set forth in the Scope of Work.
14. The Report contains a complete examination of the collection system, transfer Stations, and the Landfill. It examines details of the collection system, such as the types of equipment utilized (semi-automated, mini-packer, and Baby Packer), the routes carried out by GSWA, and GSWA Staffing. The Report provides PUC with a good understanding of the basic components of the GSWA system and their functioning.
15. An important task in this project is for MSW to provide GSWA and PUC with an updated rate model, and to particularly address whether the current rate structure is sufficient to meet the needs of GSWA. The rate model is based upon various cost determinations arrived at by MSW. Particularly expensive aspects of the program are cell construction at \$2M per acre. For example, Cell 3 contracted construction costs are approximately \$27,000,000 for approximately 13.3 acres (roughly \$2M per acre).³ Cell closure costs are estimated to be \$820,000 per acre.⁴
16. MSW concluded that rate increases will be necessary to enable GSWA to meet its full costs. The need for rate increases is primarily due to the necessity of establishing reserve funds for Layon cell construction and Layon/Ordot closure. Rate increases could be in the form of a single increase in FY2024 or increases in both FY2022 and 2024. Total increases would range around 30%, or an increase of approximately \$10 per customer over the present bill. Commercial rates would increase from \$171.60 per ton to \$225 per ton. Such increases would mitigate substantial long-term projected deficiencies in the Layon Closure and Post-Closure Reserve Funds under current and projected rates and projected system costs.⁵
17. The rate increase recommendations by MSW are merely that—recommendations. Of course, any actual rate increase would have to be approved by the PUC after a full rate investigation and case.
18. A major issue raised by MSW is that, under the current system, Guam households are not required to utilize collection services provided by GSWA—residential

³ Final Report at p. 3-2.

⁴ Id., at p.3-3.

⁵ Final Report at p. 3-5.

curbside refuse collection is therefore “non-mandatory.” Only roughly 50% of residential households presently have service (although this estimate may need to be further refined). MSW points out that “Guam is in a very small minority of jurisdictions that has not established exclusive, mandatory residential refuse collection.”⁶ Requiring residential homeowners to have mandatory service would increase the revenues of GSWA and at least partially reduce the amount of rate increases that GSWA would require.

19. MSW has also provided a “Manpower & Staffing Analysis” of GSWA. Before PUC can approve any rate increase for a public utility, it must compare GSWA with “at least (4) other utilities in the US mainland which provides similar services to a comparable number of customers.”⁷ This study was prepared in order to assist GSWA in the event that it files a rate case. The statutorily mandated manpower & staffing study will already have been accomplished.
20. MSW has provided a study which complies with the statutory requirements. Based upon an overview of 4 selected cities, MSW concludes that “GSWA is maintaining slightly larger collection system than necessary to service its customer base. However, this may be appropriate if GSWA is obligated to collect from non-customers and/or support other services (e.g., illegal dump cleanups), which may not be the case in the benchmark cities. Furthermore, GSWA maintains incrementally more customer service staff. This is to be expected from a non-exclusive provider of service who must track current customers, and manage new customer onboarding and suspension of accounts for former customers.”⁸
21. Regarding manpower & staffing, MSW again concludes that “non-mandatory collection policy hampers GSWA productivity and increases management burden.”⁹
22. MSW has also conducted a “Management & Operational Evaluation” of GSWA. MSW finds that “the current management staffing configuration is appropriate for the GSWA’s current break down of directly managed and contracted operations.”¹⁰

⁶ Id., at p. 3-6.

⁷ 12 GCA § 12102.2(d).

⁸ Id., at p. 4-4.

⁹ Id., at p. 4-6.

¹⁰ Id., at p. 6-1.

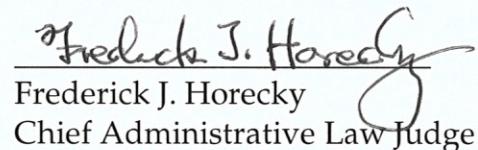
23. MSW also determines that "current authority senior management and staff possess the industry knowledge, experience, and commitment to operate the residential collection system and the residential convenience centers affectively. The framework for the collection system is appropriate, and the user fee structure is typical of numerous programs on the US mainland that must cover their full costs from direct fees charged to customers."¹¹

24. MSW does recommend some modifications of the refuse and recycling route configurations. These would involve "route balancing" and reduction of the numbers of operating routes per day. MSW questions, however, whether GSWA should takeover certain functions that are presently contracted, such as Ordot Post-Closure and Layon Operations.¹²

RECOMMENDATION

25. The ALJ requests that the PUC approve the FINAL REPORT of MSW Consultants and adopt it as the PUC Management Audit of GSWA.
26. A Proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 26th day of October 2020.



Frederick J. Horecky
Chief Administrative Law Judge

¹¹ Id., at p. 6-2.

¹² Id., at p. 6-3.

Management Audit of the Guam Solid Waste Authority

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FINAL REPORT

Presented To:
GUAM PUBLIC UTILITIES COMMISSION

October 20, 2020



Introductions

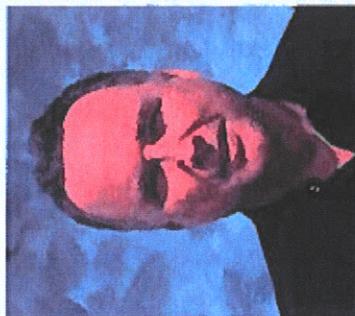
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Walt Davenport
President



John Culbertson
Vice President



Steve Lynch
Executive
Consultant &
Project Manager



Francesco Canepa
Analyst



Don Grigg
Golder



Confidential Draft



Final Report

3

- Full details are contained in our Final Report
- This presentation is intended as an executive summary



October 15, 2020



Management Audit of
the Guam Solid Waste
Authority

COVID-19 Disclaimer

4

- After discussions with the Guam Public Utilities Commission (PUC) Law Judge and Guam Solid Waste Authority (GSWA), it was determined, at this time, no attempt would be made to integrate and update the analysis to capture impacts from COVID-19 to the GSWA.
- Such impacts may include:
 - An increase in waste generation from the residential sector
 - A decrease in waste generation from the commercial sector
 - Increased risks to operations staff of contracting the COVID virus
 - Unforeseen costs resulting from the above

Agenda

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- Chapter 1 (Introduction)
- Chapter 2 (Existing System Description)
- Chapter 3 (Rate Model Analysis)
- Chapter 4 (Manpower & Staffing Analysis)
- Chapter 5 (Review of Contracts)
- Chapter 6 (Management and Operations Evaluation)
- Next Steps

Chapter 1

Key Milestones

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- 2008: Court appoints Receiver to assume all solid waste and recycling responsibilities on Guam

- 2017: Legislature passes two key Statutes in anticipation of the return of solid waste and recycling duties to GovGuam

- Assignment of solid waste and recycling powers and duties to the Guam Solid Waste Authority (“GSWA”)

- Assignment of the Public Utilities Commission (“PUC”) to perform a management audit

- April, 2019: GSWA resumes responsibility for solid waste
- 2019: MSW Team retained by PUC to perform audit

Solid waste receivership could end in January

By MICHAEL DEGARDO | THE GUAM DAILY PRESS

APRIL 1, 2019

Michael DeGardo | THE GUAM DAILY PRESS



- MOST POPULAR
- REELECTION EFFORTS: Governor Jettstone's 2 count of COVID-19 are down
 - BAEKENDO EVENTS: Governor Jettstone's 2 count of COVID-19 are down
 - BAEKENDO EVENTS: Governor Jettstone's 2 count of COVID-19 are down
 - Arrested suspect being taken under review
 - Guam's first 2019 typhoon hits Tugatug, Chalan Kanoa
 - Number of passengers on flight to Clark reduced
 - GPPC: Outlaw Liver to be enforced
 - Man dies after falling from roof
 - There is no hope after being freed from 27A
 - BAEKENDO EVENTS: Guam's 2nd typhoon hits Tumon and Agana
 - New mobile app helps drivers find parking
 - Governor holds large gathering to mark

Solid Waste Authority takes over island's solid waste system on Wednesday

Pacific Daily News | Published: 2:57 p.m. CT | April 30, 2019



Check information, including illustrations, manager for Department, Biroshie & Bratton Inc., towards of problems he encountered when the management first started Guam Solid Waste Authority operations.

Comments | Energy | Letters | Email

The Guam Solid Waste Authority will take over operating the island's solid waste system, effective Wednesday, after a federal judge issued an order Monday, partially ending the 11-year-old solid waste program.

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Chapter 1

Scope of Audit

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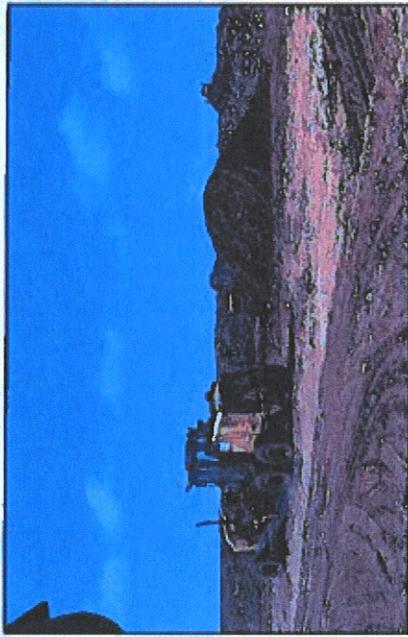
- Baseline system assessment
- Rate model review and revenue sufficiency analysis
- Manpower and staffing analysis of GSWA's waste and recyclable collection and transfer operations
- Review key third-party service contracts inherited by the GSWA from the Receiver
- Evaluation the current management and operational capabilities of the GSWA



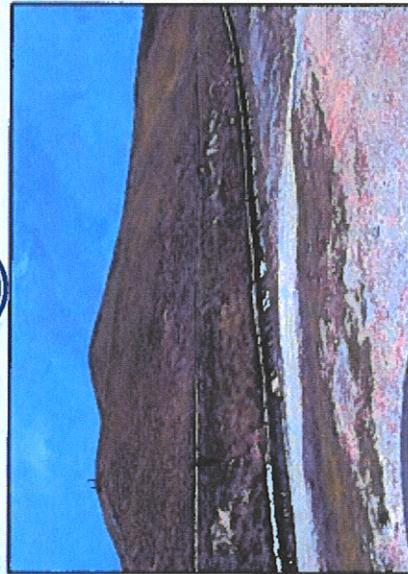
Chapter 2

Existing System Description: Facilities

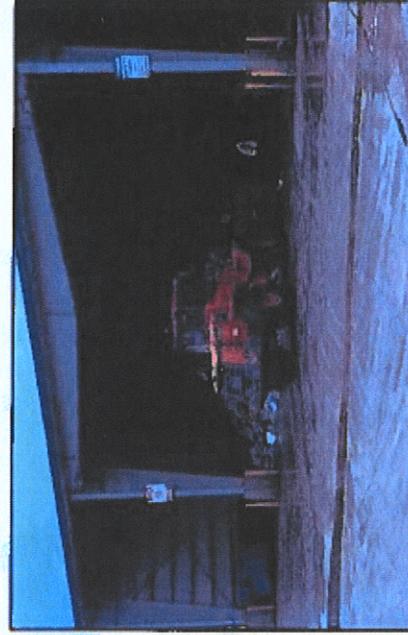
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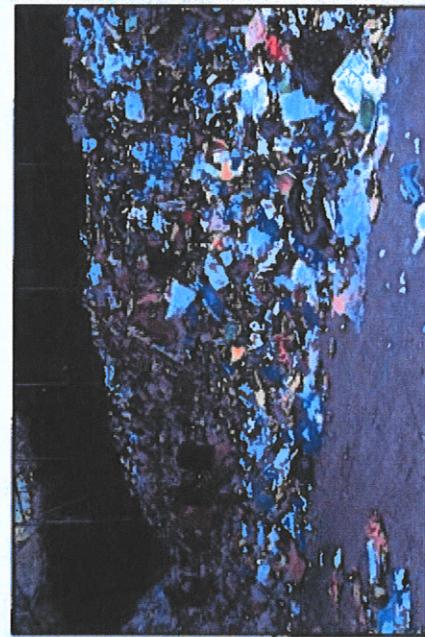
Layon Landfill



Ordot Dump



Hauler Transfer Station



Recycling Facility



HHW Collection



Residential Transfer Station

Chapter 2

Existing System Description: Collection

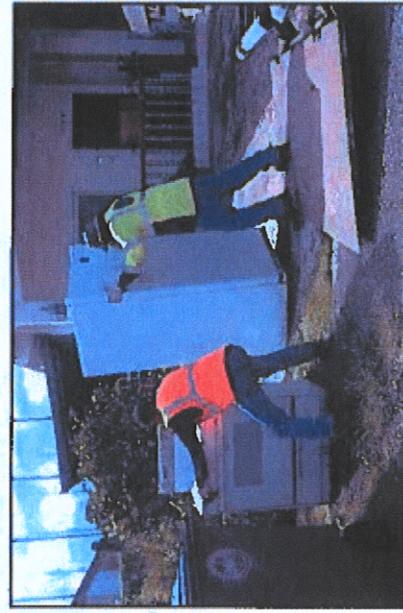
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Refuse Collection



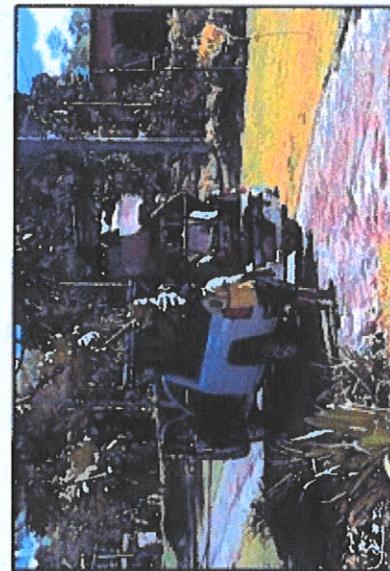
Recycling Collection



Bulk Waste Collection



Mini Packer



Baby Packer

Chapter 2

Existing System Assessment

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Collection Model		Inputs		Service Levels (annual)				Key Results				Key Results Summary					
Collection Type	Model	Equipment	Material	Residential Households	Commercial Customers	Total Customers Served	Collection Frequency (per week)	Collection Weeks (per year)	Collection Days (per year)	Collection (Overdue) (%)	Material Collected (tons/year)	Percent of Tons Collected	Calculated # of Routes (per day)	Actual # of Routes (per day)	Total Trucks (per route)	Trucks (per route)	Average Weight (per stop)
Refuse	Refuse	None	Refuse	17,752	-	17,752	1	52	52	70.3%	14,096	5.5%	8.0	5.8	593	682	2.4%
Refuse	None	None	Refuse	1,383	-	1,383	1	52	52	1.0%	1,098	1.0%	2.0	1.1	247	247	1.4%
Refuse	Baby	None	Refuse	478	-	478	1	52	52	1.5%	380	1.5%	1.0	0.6	37	111	3.0%
Recyclables	None	None	Recyclables	18,955	18,955	18,955	0.5	52	26	26	1,734	8.6%	3.0	2.1	1,990	1,985	1.1%
Butty Waste	None	None	Butty Waste	19,230	19,230	19,230	0	52	0	2	822	4.2%	1.0	2.1	44	53	2.4%
Sum		Sum-products		Sum				20,085				100.0%					

- Collection System: Pro forma collection model development
 - Residential Transfer Stations: Operations and financial review
 - Landfills: Engineering review
 - Review of Regulatory Requirements

Chapter 3

Rate Model Evaluation

- PUC oversight of GSWA rates

- GSWA using Receiver's rate model

- MSW Team review of model and critical updates

- Validation of projected construction, closure, and post-closure care costs

- Bond proceeds for Cell 3

- Debt service

- Minimum balances for reserve funds

- Escalation factors

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							FY-2021
5	Total Tons	Program Revenue and Cost					
6	Total Dated Billable Tons (Commercial/Municipal/Others)						
7	Total Residential Customers						
8	Total Residential Tons						
9	Total Trade/Sales Tons						
10	Total Dated Billable Tons & Residential/Tons						
11	Residential:						
12	Disposal Filing Fees	\$ 12,079,715					\$ 12,06,561
13	Commercial Discount Offsets	(833,538)7					(835,619)
14	Residential Collection Fees	7,327,780					7,473,822
15	Self-Haul Fees (e.g. Residential/Trade/Sales)	357,424					388,146
16	Resolution Fees:						
17	Residence Fees	65,920					67,704
18	Trade Tax Fees	3,068					3,159
19	Recycling Revenue	5,682					5,632
20	Offsite for undetectable accounts	-					-
21	Offsite for undetectable accounts	(100,000) ¹					(100,000)
22		\$ 18,304,588					\$ 19,059,455
23	Expenses and Reserve Depositor:						
24	Administrations:						
25	Salaries and Benefits	\$ 328,765					\$ 1,027,362 ²
26	Travel	35,000					36,050
27	Equipment ³	5,000					5,150
28	Supplies and Materials/Others	43,500					44,065
29	Contractual	572,842					580,027
30	Utilities	153,725					158,126 ⁴
31	Recover Expense	-					-
32	Revenue for Unbilled Contract Due Date Expenses						
33	Total Adverseuron and Consent Decree Revenue	\$ 1,738,634					\$ 1,682,362 ⁵
34	Disposal (Landfill) and related activities:						
35	Salaries and Benefits	\$ 175,804					\$ 122,527
36	Leasing/monitoring costs/Recycling ⁶	\$ 550,000					\$ 567,015
37	Landfill Operator Cost ⁷	3,642,556					3,758,550
38	Header/Debris Transfer Station Cost ⁸	2,675,880					2,861,173
39	Residential Disposal	(2,355,932)					(2,455,307)
40	Administration	951,038					946,059
41	Contingency	-					200,000
42	Transfer to Los Gatos General Fund	-					-
43	Cell 3 Financing Reserve Contributions:	2,299,886					2,999,860
44	New Cell Development	50,000					50,000
45	Cell Closure	50,000					50,000
46	Post Closure Care	80,000					100,000
47	Total Disposal ⁹	\$ 8,893,705					\$ 9,236,317
48	Residential Collection:						
49		\$ 31,61					

Chapter 3

New Rate Model Assumptions

12

Assumption	Value
Annual Waste Growth (Tons)	0.35%
Population / Household Growth	0.45%
Cell Construction Cost per Acre - 2012	\$2,000,000
Cells Closure Cost per Acre - 2019	\$820,000
Layon Post-Closure Cost per Acre - 2012	\$15,000
CPI Growth - Not Contracted	1.19%
CPI Growth – Ordot and Layon	1.86%
CPI Growth – Hauler Transfer Station	2.82%
Airspace Utilization Factor (Tons/CY)	0.675
Interest Rate	0.5%
Unrestricted Cash Balance Minimum (Days)	90
Unrestricted Cash Balance Minimum (Percent)	24.7%
Admin Cost Allocation to Disposal	50.0%
Admin Cost Allocation to Collection	50.0%

NOTE: The only debt service assumed to be paid by solid waste revenues is for the Cell 3 construction bonds. The earlier receiver's model assumed some debt service payments for older bonds.

Chapter 3

Alternative Rate Path Scenarios

13

Unique Assumptions	Base Revised Rate Model	Iteration #1: One Rate Increase	Iteration #2: Two Rate Increases
Cell Build Reserve Policy	Annual deposit assumptions provided by GSWA	Maintain approximately 10% balance after each cell build	Maintain approximately 10% balance after each cell build
GovGuam Fund Policy	None, substantial deficits will occur beginning in FY 2024	Stabilize GovGuam Fund through FY 2035	Stabilize GovGuam Fund through FY 2035
Layon Closure and Post Closure Reserve Policy	None	Calculate and monitor long-term deficiencies	Calculate and monitor long-term deficiencies

- Base Rate Model, Revised (Status Quo)

- First Iteration

- 30% rate increase in 2024
 - \$39/mo per household
 - \$223/ton

- Second Iteration

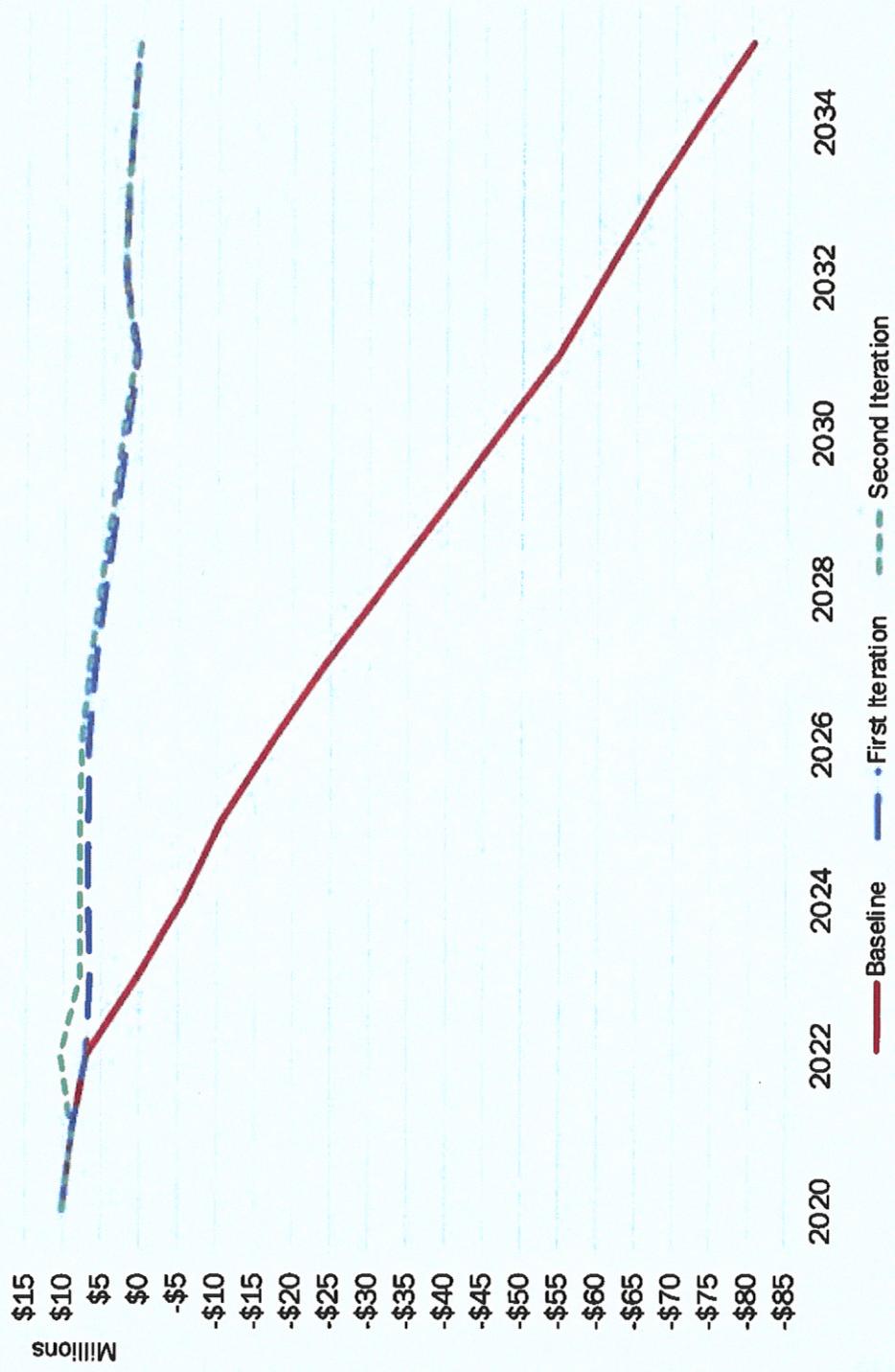
- 17%-19% rate increase in 2022
 - 9%-10% increase in 2024
 - \$35/mo up to \$38/mo per household
 - \$205 up to \$225/ton

Chapter 3

Comparison of Rate Scenarios

14

Projected GovGuam Solid Waste Fund Balance



Chapter 3

Mitigation of Rate Insufficiencies (Ch 3)

(15)

- Near Term

- Rate Increases

- Longer Term Options

- Rate increases
 - Cost reduction programs (capital and operating)
 - Broadening the ratepayer base through mandatory collection
 - Assessing certain base residential system costs via taxes or user fees

Chapter 3

Benefits of Mandatory Curbside Collection

16

- Customer base stability

- No unexpected additions or subtractions

- Rate equitability

- All households benefit from having a solid waste utility

- Optimized collection productivity

- True high-density routing

Random Selection of US Mainland Jurisdictions

Municipality	State	Total Households	Mandatory Residential Collection?
Deerfield Beach	Florida	42,671	Yes
Erie	Pennsylvania	44,790	Yes
Asheville	North Carolina	41,626	Yes
San Buenaventura	California	42,827	Yes
Clinton	Michigan	40,057	Yes
Simi Valley	California	42,506	Yes
Billings	Montana	41,165	Yes
Guam	N/A	No	No
Richardson	Texas	40,630	Yes
Davenport	Iowa	44,087	Yes
Everett	Washington	41,447	Yes
Vallejo	California	44,433	Yes
Clarksville	Tennessee	41,220	No
Fall River	Massachusetts	42,750	Yes
Tuscaloosa	Alabama	40,842	Yes
San Mateo	California	40,014	Yes

Chapter 3

Long Term Deficiencies in Layon Reserve Funds

17

- Accrual of Layon closure and post-closure obligations projected through 2066
- Long term revenue sufficiency was out of scope...but will be increasingly important

Reserve Component	Base Revised Rate Model
Last Year of Layon Capacity	2115
Current Aggregate Deficit in Layon Closure and Post-Closure Funds	-\$28,265,271
Year Layon Closure Expenses Begin	2066
First Year Layon Closure Reserve Turns Negative (Year/Reserve Deficit)	2088 / -\$40,877,794
Year Layon Post-Closure Expenses Begin	2066
First Year Layon Post-Closure Reserve Turns Negative (Year/Reserve Deficit)	2101 / -\$149,170,489

Chapter 4

Manpower/Staffing Comparative Research

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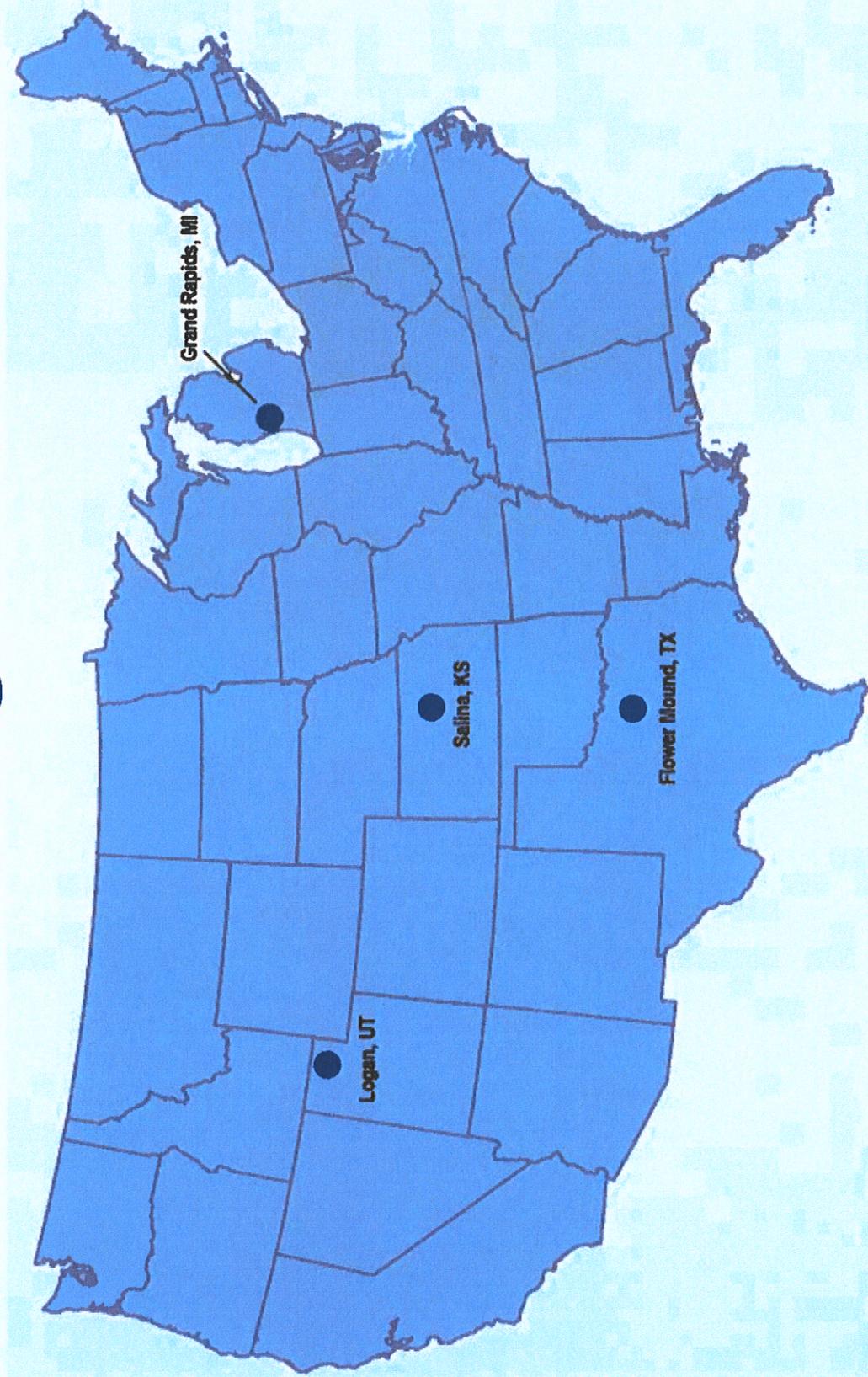
- **Step 1:** Filter US Census Bureau data for similar household count
- **Step 2:** Screen for system similarities
 - Semi-automated collection
 - Remote location (i.e., not in metro areas)
- **Step 3:** Develop research questionnaire
 - Manpower/staffing
 - Customer base, routing, and other system variables for context
- **Step 4:** Contact cities and compile data
 - Only two of the five identified ultimately participated
- **Step 5:** Supplement results with other case studies available to MSW Consultants

Limitation: No two solid waste and recycling collection programs are equal!

Chapter 4

Participating Cities

⑯ 19



Chapter 4

Participating City Details

20

Municipality	Isolated from Metro Areas	Total Residential Households	Residential Households Served	Mandatory, Exclusive Service?	Collection Technology	Collection Service Provider	Collection
Guam	Yes	42,026	19,613	No	Semi-Auto	City	
Salina, KS	Yes	19,453	15,100	No	Semi-Auto	City	
Flower Mound, TX	No	22,792	22,792	Yes	Semi-Auto	Contractor	
Logan, UT	Yes	15,632	15,632	Yes	Full Auto	City	
Grand Rapids, MI	Yes	55,000	47,575	No	Full Auto	Open	

Chapter 4

Manpower/Staffing Performance Metrics

21

Staff Roles Included

Performance Metrics

- Collection-related staffing only

- Collection Crews
- Route Supervisors
- Customer Service Reps
- Cart Management Staff

- Staff per Route

- Ability to fill routine routes

- Staff per 1,000 Households Served

- Absolute number of routes

- Average Households per Route

- Collection productivity

Chapter 4

Comparison of Key Performance Indicators

22

Municipality	Guam	Salina, KS	Mound, TX	Flower Logan, UT	Grand Rapids, MI
Routes per Day	15.0	7.0	13.0	9.9	16.5
Staff per Route	2.5	3.1	2.3	1.6	1.8
Households Served	19,613	15,100	22,792	15,632	47,000
Staff per 1,000 Households	1.9	1.5	1.3	1.0	0.5
Avg. Households per Refuse Route	490	604	569	909	921
Avg. Households per Recycling Route	1,961	1,510	911	1,818	1,864

Chapter 4

Findings

23

- *Staff per Route: In line*

- *Staff per 1,000 HHs:*
Above benchmarks

- *Route Size: Below*
benchmarks

- *Collection Technology:*
Automation greatly increases productivity



Automated Sideloader

Chapter 5

Review of Key Third Party Contracts (Ch 5)

24

Contract	Service Provider	Start Dates	Optional Renewal Dates	End Date
Post-Closure of the Ordot Dump	Brown and Caldwell	May, 2018	May, 2023 May, 2028	May, 2033
Operation of the Layon Landfill	Green Group (Herzog)	April, 2011	April, 2016 April, 2021	April, 2026
Operation of the Commercial Transfer Station	Guahan Waste Control, Inc.(Mr. Rubbishman)	May, 2011	May, 2016 May, 2021	May, 2026

Chapter 5

Ordot Post-Closure Operations Contract Summary

25

Service Provider	Brown and Caldwell		
Term	Start May 2018	End May 2033	Option Renewal May 2023 / May 2028
<p>“Routine Services” including preventive maintenance and monitoring of all equipment and systems required to meet all environmental requirements for a closed landfill and closure reporting and documentation</p> <p>“Non-Routine Services” defined as “services and maintenance that cannot be performed by the staffing assigned to carry out Routine Services”</p> <p>Procure, maintain, repair and replacement of all equipment required for Routine Services</p> <p>Full compliance and reporting responsibility</p>			
Services Provided			
Services NOT Provided	<p>None – All services required will either be “Routine” or “Non-Routine”</p> <p>If “Routine” – \$800,732 in 2011 plus CPI-based annual escalation, plus pass-through costs which are limited to leachate treatment and hauling, stand-by water trucks and utilities</p> <p>If “Non-Routine” – Fee subject to mutual agreement via a defined “Task Order” procedure</p>		
Fee Structure			

Chapter 5

Ordot Operations Contract Observations

26

- **Full service, turnkey contract**
 - Places nearly all risk on the Contractor
 - Contractor must account for multiple scenarios to continue providing the required tasks.
 - Higher risk allocation on contractor = increased man-hours and higher overall annual cost
- **Example of a term that increases contract pricing: Leachate Hauling**
 - Leachate is typically pumped from the leachate storage tanks to the Hagatna WWTP
 - Contractor required to have a contingency arrangement to haul leachate from the facility at a minimum rate of 4,800 gph, 24 hrs/day, 7 days/wk
 - Likely requires the operator to contract multiple haulers on an emergency, on-call basis, thus increasing the cost of the contract
- **Single service provider**
 - Convenient, simplifies contract management but limits price competition
 - Golder has seen similar facilities break out different services to multiple service providers to increase competition and achieve more cost-effective pricing

Chapter 5

Layon Landfill Operations Contract Summary

27

Service Provider	Green Group (formerly Herzog)		
Term	Start	End	Option Renewal
	April 2011 April 2016 / April 2021		
Very inclusive turnkey landfill operations including operations during cell 1&2 construction (before receipt of waste) and uninterrupted operations during future cell construction			
Procure, maintain, repair and replacement of all equipment			
Services Provided			Daily and periodic cover from on-site material
Waste screening and set aside			
Full compliance and reporting responsibility			
Services NOT Provided			Environmental monitoring, cell construction, closure and post-closure responsibilities"
80,000 tons per year put or pay at \$2,871,681 in 2011 (\$35.90/ton) plus CPI-based annual escalation			
\$21.90/ton for waste over 80,000 tons per year plus CPI-based annual escalation from 2011			
Fee Structure			Plus pass-through costs which are limited to new governmental charges
			Liquidated damages for failure to achieve minimum effective density (1,350 lbs/cubic yard) at the cost of \$20/cubic yard, plus CPI-based annual escalation

Chapter 5

Layon Operations Contract Observations

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- Full service, turnkey contract
 - Places nearly all risk on the Contractor
 - Contractor must account for multiple scenarios to continue providing the required tasks.
 - Higher risk allocation on contractor = increased man-hours and higher overall annual cost
- Single service provider
 - Convenient, simplifies contract management but limits price competition
- Unique elements
 - Operator to coordinate the excavation and stockpiling of soil for daily cover use with the Receiver and GSWA
- Operator to anticipate Final Closure Construction of portions of Cells 1 and 2; specifically preparing Cells 1 and 2 to intermediate cover conditions in accordance with applicable laws and landfill permits.
- Depending on timing of the contract closeout, existing conditions should be reviewed prior to enforcing this requirement
 - requiring Cells 1 and 2 to be at intermediate grades prior to actual waste volume achieving those requirements could reduce the amount of available landfill volume (filling of Cell 1 and 2 with soil to achieve intermediate cover grades)

Chapter 5

Commercial Transfer Station Operations and Hauling Contract Summary

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Service Provider	Guahan Waste Control, Inc		
Term	Start	End	Option Renewal
	May 2011	August 2026	April 2016 / April 2021
Services Provided	<p>Very inclusive turnkey transfer station provision and operations</p> <p>Procure, maintain, repair and replacement of all equipment</p> <p>Outgoing scale provision, operation, maintenance, repair and replacement</p> <p>Waste screening and set aside</p> <p>Full compliance and reporting responsibility</p>		
Services NOT Provided	Escort vehicles from transfer station to Layon Landfill. This was added via Amendment No. 1 in 2011.		
Fee Structure	<p>80,000 tons per year put or pay at \$30.08 in June 2011 plus cost of escort vehicles (added via Amendment 1) and CPI-based escalation</p> <p>Additional waste up to 145,000 tons per year, with 600 tons per day maximum at same rate</p>		

Chapter 5

Transfer Station Operations/ Haul Contract Observations

30

- **Full service, turnkey contract**
 - Places nearly all risk on the Contractor
 - Contractor must account for multiple scenarios to continue providing the required tasks.
 - This risk allocation will typically be accounted for in increased man-hours/anticipated costs, and therefore be reflected in an overall higher annual cost.
- **Single service provider**
 - Convenient, simplifies contract management
 - May limit price competition
 - Facility operations and hauling should be procured and priced separately
 - Future consideration to split services to test competition for truck haul
- **Unique elements**
 - Additional waste up to 145,000 tons per year must be accepted if delivered
 - Maintaining this standby capacity is a burdensome and costly feature
 - ...but of significant value to GSWA, representing a substantial risk allocation away from GSWA.

Basis of Opinion

- Review of GSWA Data
- Benchmarking research findings
- Collection system performance modeling
- Financial analysis
- Professional experience
- Site visit during week of November 18, 2019
 - Meetings and interviews
 - Facility tours and observations
 - Collection route observations

Chapter 6

Findings

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- Current Authority senior management and staff possess the industry knowledge, experience and commitment necessary to operate the collection systems and residential drop-off centers
- Several operational improvements could be made to the operation of the residential collection system and the three residential drop off centers
- Senior Authority management has indicated that the Authority should take over Ordot Dump and Layon Landfill contracts upon their upcoming renewal dates
 - Ordot Post Closure: May 2023
 - Layon Operations: April 2021
- The MSW Team is of the opinion that both Authority management and operational resources would require substantial enhancement in order to successfully assume these additional responsibilities

Next Steps

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- A revised Final Report will be delivered by end of the week (10/23/20)
- The Final Report will include an Executive Summary as requested by the PUC

Thank You

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