TESTIMONY FOR THE COMMITTEE ON DISASTER RECOVERY, INFRASTRUCTURE, AND PLANNING

VIRGIN ISLANDS WASTE MANAGEMENT AUTHORITY

35TH LEGISLATURE OF THE VIRGIN ISLANDS

THURSDAY, SEPTEMBER 7, 2023

9:30 A.M.

ROGER E. MERRITT, JR. EXECUTIVE DIRECTOR



Good morning, Honorable Milton E. Potter, Chairman, and other Committee members of the 35th Legislature's Committee on Disaster Recovery, Infrastructure, and Planning, and members of the viewing and listening audience. My name is Roger E. Merritt, Jr., Executive Director of the Virgin Islands Waste Management Authority.

I am appearing before you today with the Authority's Leadership Team consisting of Luis Sylvester,
Deputy Executive Director, Daryl Griffith, Chief Financial Officer, Alex Bruney, Wastewater Engineering
Manager, Juanita Iles, Territorial Lead Grant Administrator, Eloise Brown, Territorial Grant
Administrator, and Ron Philips, Senior Wastewater Engineer to provide testimony relevant to the
Authority's planned, in-process, and completed projects; the status of all federal and local funding
identified for projects, as well as the challenges we have encountered with respect to our role in the
Territory's disaster recovery effort.

Before I begin the testimony, I would like to take this opportunity to pay our respects to our fallen Team member Daryn R. Hodge, who tragically lost his life due to gun violence last month. We continue to pray for his family, and friends, and may God ease the pain as they suffer through their bereavement.

I would like to provide a reminder to the community and members of the viewing and listening audience, when the Waste Management Authority was created in 2004 (from the Department of Public Works), the Authority was immediately saddled with pre-existing DOJ solid waste and wastewater consent decrees imposed against the Territory. So, we have faced the added burden of having to respond to costly federal mandates along with all the other costs associated with managing the Authority from our very inception.

Nevertheless, we remain committed to our mission to provide solid waste and wastewater services for the Territory in the most environmental and cost-effective way possible. Also, it is no secret the Authority inherited an outdated wastewater system, which was further damaged by Hurricanes Irma and Maria, along



with a solid waste system that oversees two un-permitted, and un-lined landfills, which initially began as dump sites. However, the Authority has strived to bring both systems into compliance with all applicable local and federal laws.

Our Authority is unique because in most jurisdictions throughout the country, most Waste Management Authorities are only responsible for solid waste services, while most Water Authorities, like WAPA, would be responsible for drinking water and wastewater services.

These services are very costly, especially when you consider the Authority is tasked with maintaining a wastewater system that has outlived its useful life along with operating and maintaining two antiquated landfills which should have been replaced with modern, Subtitle D facilities with liners and leachate collection systems decades ago.

SOLID WASTE

The Authority manages the Territory's solid waste collection, transportation, and disposal network. Municipal solid waste is collected (i.e., from bin sites, convenience centers, public receptacles, and curbside locations) and ultimately disposed of at the Bovoni and Anguilla landfills.

Approximately six hundred tons of waste per day is disposed of daily and nearly 200,000 tons of waste is disposed of annually in the Territory's landfills. The Authority is preparing to eliminate the majority of the public unmanned bin sites by constructing and operating convenience centers throughout the Territory, like those found at Mandahl on St. Thomas and Peters Rest on St. Croix.



FEDERAL GRANTS UNIT-SOLID WASTE

CDBG-DR Tranche 2 Funding

The Tranche 2 subrecipient grant agreement between the Virgin Islands Housing Finance Authority (HFA) and VIWMA has been executed. This grant provides funding for the implementation of designated projects outlined in the Tranche 2 Action Plan under the Housing and Urban Development (HUD) Infrastructure Repair and Resiliency Program directly tied to the damages related to Hurricanes Irma and Maria. The Authority has submitted the applications for the convenience centers and landfill projects in the amounts of \$18,046,064.00 and \$46,760,901.00 respectively totaling \$64,806,965.00.

Convenience Centers Project (\$18,046,064.00)

On November 2, 2022, the Authority was issued a Notice to Proceed (NTP) for the following 5 out of 7 Convenience Centers under the CDBG-DR Grant – Tranche 2:

Convenience Centers	Location	Total Cost	30% Design, Environmental Assessment, Cost Analysis - Allotment
Mon Bijou	St. Croix	\$ 1,486,333.72	\$ 46,459.30
Estate Concordia	St. Croix	\$ 1,692,233.72	\$ 46,469.30
Cotton Valley	St. Croix	\$ 1,320,172.49	\$ 51,506.41
Cancryn	St. Thomas	\$ 1,915,726.37	\$ 53,753.20
Red Hook	St. Thomas	\$ 1,470,086.35	\$ 46,459.30
Bournefield	St. Thomas	\$ 1,742,933.65	\$ -
Susannaberg Transfer Station Upgrade	St. John	\$ 8,418,578.15	\$ -
Total Convenience Centers Budget		\$ 18,046,064.45	\$ 244,647.51

This officially authorized the Authority to use an engineering firm to complete the designs, the environmental assessments; the cost analysis; and advertise the Request for Proposals (RFP) and receive



bids to design and build the centers. The Authority is prohibited from taking any action for construction activities until HFA has issued a NTP specifically for those activities, as outlined in the Project Agreements.

Thus far, the Authority has used engineering consultants to conduct the Environmental Assessments on all approved applications and has submitted them to HFA for review and approval. After the environmental assessments are completed, a report will be published, and a public comment period will be conducted. The Federal Consistency Determination (FCD) Pre-Application Meetings with DPNR required for the WMA Convenience Centers for St. Thomas was held on June 21, 2023, and the St. Croix FCD was held on June 29, 2023. VIWMA has incorporated DPNR's comments into the RFP. The RFP for the St. Croix sites is currently being advertised.

VIWMA is working with the Virgin Islands Housing Authority (VIHA) on a lease agreement for the Bournefield site, which will establish site control. HFA will grant the Authority the NTP based on the Letter of commitment from VIHA. This application is in the final approval stage. The Susannaberg Transfer Station Upgrade application is completed and is also in the final stages of approval by HFA.

Landfill Project (\$46,760,901.00)

Included in the CDBG-DR Tranche 2 funding are the Southeast Fill project for the Anguilla Landfill on St. Croix and the partial phased closures (Phases 1-6). The Southeast fill area will increase airspace and give the Authority additional time to select and build a new integrated solid waste management facility on St. Croix slated in the CDBG Tranche 3 allocations. The proposed closure of the Anguilla Landfill will comply with existing DOJ Consent Decrees. VIWMA is in the application stage of this project and has complied with the request of HFA by receiving support letters from the DOJ, VIPA and DPNR. VIWMA is currently working with DPNR on all permits needed for these projects. Additionally, the Authority is



working together with the Virgin Islands Port Authority (VIPA) to update and finalize the Anguilla landfill lease to establish VIWMA's site control. This collaboration between VIWMA and the various local and federal agencies will ensure this project is completed by the grant expiration deadline of September 2026.

CDBG-DR Grant - Tranche 3 (\$100,000,000.00)

The funding has been obligated in HFA's CDBG-MIT action plan and HFA is currently working on developing the grant application, so VIWMA can apply for the funds. Although no specific date has been given; we anticipate receiving this application package no later than December 2023. This funding is earmarked for the following projects:

- Bovoni Landfill Expansion Project Design, Permits, Assessments, Site Acquisition
- Bovoni Landfill Closure Project Design, Environmental Assessments, Survey
- Anguilla Landfill Closure Project (Phases 7,8) Design, Environmental Assessments, Survey
- New Integrated Solid Waste Management Facility St. Croix Design, Permits, Assessments
- New Integrated Solid Waste Management Facility St. Croix Site Acquisition

VIWMA will also incorporate a request for Demolition Grinders in the budget to HFA. This would decrease the amount of non-hazardous solid waste, construction, and demolition (C&D) material received from various Virgin Islands demolition projects. The proposal recommends the acquisition of (2) two Low Speed Demolition Grinders one on St. Croix and one on St. Thomas, along with trained personnel, and associated costs.

Federal Emergency Management Agency (FEMA) – Public Assistance (PA) Funds

The Authority has continued to work with local and federal agencies to review damages and formulate projects, resulting in the obligation of 16 FEMA category A and B solid waste projects to date. These



projects total \$16,095,847.05. Ten projects have been reimbursed, five fully reimbursed and five partially reimbursed. The total reimbursement to the Authority thus far is \$11,823,160.28. Currently, project worksheets amounting to \$4,272,686.72 are being reviewed and/or processed for reimbursement or payment to the Authority.

DPNR Solid Waste Grant, Waste Diversion Grant (\$6,000,000.00)

DPNR was awarded the EPA Solid Waste Grant, (Waste Diversion) in FY 2021 and has worked with the Authority on the workplan. On August 17, 2023, the SubAward Agreement was received and signed by VIWMA. We are currently finalizing the job description for a Sustainable Materials Coordinator, who will be responsible for administering the Territory's solid waste diversion/recycling program. This includes planning, budgeting, procurement, implementation, coordination, promotion, inspection, data collection and monitoring required to achieve program objectives, to comply with Territorial, and Federal policies, rules, and regulations. A Standard Operating Procedure for handling organics, beginning with source separation will be developed in conjunction with this Grant.

WASTEWATER

The Authority's facilities collect, treat and discharge nearly four (4) million gallons of wastewater per day. St. Croix accounts for approximately 1.6 million gallons per day, St. Thomas accounts for approximately 2.1 million gallons per day, and St. John accounts for approximately 130,000 gallons per day. Our wastewater infrastructure in St. Croix consists of approximately 120 miles of sewer lines; fifteen (15) pump stations, 1800 manholes and one (1) wastewater treatment plant. For the district of St. Thomas/St. John, there are approximately three hundred (300) miles of sewer lines; fifteen (15) pump stations, 2500 manholes and seven (7) wastewater treatment plants. Veolia operates the Harold A. Thompson and Pedro A. François Wastewater Treatment Plants on the islands of St. Thomas and St. Croix, and the contract



expires in 2027. The GVI and the Authority are close to fulfilling the thirty-year Consent Decree. The Authority started to identify staff in FY2022 and has hired a Wastewater Operations Technical Manager and District Manager to help oversee operations at both plants upon expiration of the contract. This will potentially result in annual savings of nearly \$4 million. We would like to remind the community and members of the viewing and listening audience to keep Fats, Oils and Grease (FOGs) out of the sewer system. Disposing of FOGs down the drain or toilet causes problems in the sewer lines. Any form of grease when poured down the drain, mixes with fluid in the sewer lines, and clings to the walls of the sewer pipes. This creates a blockage over time, which eventually causes overflows of untreated sewage into the environment or into your home and these overflows are unpleasant and very expensive to clean up. Please wipe oily pans dry and dispose of small quantities of cooking oil into used closed containers and discard them into a trash can.

Federal Grants Division – Wastewater

FEMA – Federal Emergency Management Agency

FEMA continues to assist VIWMA with emergency repairs, maintenance upgrades and permanent repairs to the wastewater collection and treatment infrastructure throughout the Territory because of major damages sustained after the 2017 hurricanes. VIWMA continues to repair and maintain our wastewater treatment plants, pump stations and gravity sewer lines.

STX Wastewater: VIWMA submitted the prudent replacement cost estimate (Part D) in early May to FEMA. On June 1, 2023, FEMA completed the cost estimate and provided a revised award of \$1.25 billion. On July 26, 2023, the Authority along with Witt O'Brien conducted a joint peer review with FEMA to review the final aspects of prudent replacement. Based on this discussion, the prudent replacement revised cost will most likely increase beyond the \$1.25 billion. This project is on track to be



obligated before the end of this fiscal year September 30, 2023. The VIWMA has created an Implementation Plan and Capacity Assessment to formulate the strategic and staffing plan to complete the replacement of all the sewer lines and upgrade pump/lift stations on St. Croix. FEMA has provided \$30 million in initial funding for the Architectural & Engineering (A&E), allowance in advance of the fixed cost subaward specifically for the preliminary A&E design for the replacement of the entire wastewater system on St. Croix. This project has provided the Authority with a head-start on the development of a RFP, for a design contract, while also maintaining the ability to validate the ongoing scope of work that will be the basis of funding for the fixed cost offer. In essence, the advanced funding will provide the funding source for preliminary A&E support to develop a wastewater master plan and conceptual design of the St. Croix wastewater system. The VIWMA has divided the St. Croix sewer system into sixteen (16) components.

		Est	Estimated A & E		Approved \$30			
Projects	Priority	Cost			Million A & E			
LBJ	1	\$	10,861,000.00	\$	10,861,000.00			
Mon Bijou	2	\$	1,992,000.00	\$	1,992,000.00			
Lagoon Street	3	\$	4,551,000.00	\$	4,551,000.00			
Bay Road	3	\$	1,793,000.00	\$	1,793,000.00			
Humbug II	4	\$	788,000.00	\$	788,000.00			
Humbug I	4	\$	916,000.00	\$	916,000.00			
Gallows Bay	5	\$	2,454,000.00	\$	2,454,000.00			
Concordia	6	\$	999,000.00	\$	999,000.00			
Campo Rico	7	\$	2,140,000.00	\$	2,140,000.00			
Barren Spot	8	\$	3,762,000.00	\$	3,762,000.00			
William Delight	9	\$	5,318,000.00	\$	-			
Pearl Larsen	10	\$	414,000.00	\$	-			
Ricardo Richard	11	\$	192,000.00	\$	-			
Old Barracks	12	\$	715,000.00	\$	-			
Fig Tree	13	\$	8,355,000.00	\$	-			
Anguilla (upstream sewers								
only, WWTP not included)	16	\$	18,129,000.00	\$	-			
	TBD - Pending							
VIWMA Master Plan	Approval	\$	2,500,000.00	\$	-			
Totals		\$	65,879,000.00	\$	30,256,000.00			
* Completed RFP - Out for Bid								
* RFP in Process - Engineering								

The LBJ Sewershed Infrastructure project has received four (4) proposals. The Authority completed oral interviews last month for LBJ and will award the project at the next scheduled Board meeting. Currently,



the Mon Bijou Sewershed is being advertised and will issue addendum 2 to the RFP this month based on feedback from the respondents, which will extend the submission deadline. The Engineering department is reviewing the Lagoon Street Sewershed and Bay Road Sewershed RFP comments provided by the Office of Disaster Recovery before advertising.

STT/STJ Wastewater: The mapping of non-compliance event locations has been completed, and when the wastewater infrastructure inventory is complete, the package will be submitted to FEMA as supporting documentation for the prudent replacement request. The Authority expects to have this completed and sent to FEMA by the end of this year.

USEPA – Clean Water State Revolving Fund (CWSRF)

The U.S. Environmental Protection Agency (USEPA) through the Department of Public Works and the Department of Planning and Natural Resources provides funding to the States and Territory for the construction of public wastewater treatment projects. These projects, which constitute a significant contribution to the nation's water infrastructure, include sewage treatment plants, pumping stations, collection and intercept sewers, rehabilitation of sewage systems, and the control of combined sewer overflows.

VIWMA has received funding for FY 2015 through 2022 totaling \$34,287,162.00 for pump station upgrades, sewer lines repair, wastewater treatment plant upgrades and specialty equipment.

Current VIWMA CWSRF Major Projects:

Christiansted Sewer System Rehabilitation – The Christiansted Town Wastewater Collection
 System in St. Croix is comprised of over 33,000 linear feet of sewer lines ranging from 4 inches to
 12 inches. These sewer lines primarily run along the route of the streets, where they collect and
 transport sewage via gravity from the businesses and homes to the Christiansted Interceptor and



ultimately to the LBJ Pump Station in Christiansted. This system requires rehabilitation and repair to certain sections to help extend the useful life of the system due to age and general wear and tear. This project will improve the water quality of the Christiansted Harbor. Marco St. Croix was awarded this \$8 million project and started construction on May 15, 2023. The project is forecasted to be completed by May 2025.

- Krause Lagoon Rehabilitation The Krause Lagoon Interceptor is a 24" and 30" diameter reinforced plastic material (RPM) line that transports sewage from LBJ force main and the surrounding areas to the Figtree pump station in Christiansted, St. Croix. The NTP was issued to the contractor on July 18, 2023. This project will upgrade a portion of the sewer line and has an estimated budget of \$5,418,972.90.
- Mangrove Lagoon Wastewater Treatment Plant Engineering is preparing the scope of work and
 cost estimate for project submission to DPNR and EPA for their review and approval. This project
 will include the Mangrove Lagoon roof replacement and numerous system upgrades and
 replacements to the plant. The cost of the project is currently estimated at \$6 million.

The Authority is currently preparing scopes of work for other EPA projects, and the Authority is continuously working with DPNR, who is assisting us with funding that helps in the upgrades, maintenance, and rehabilitation of this wastewater treatment plant along with others.

American Rescue Plan Act - ARPA

President Biden's Rescue Plan through the V.I. Office of Management and Budget provided funding under the Clean Water: Centralized Wastewater Collection and Conveyance. VIWMA was approved \$10,594,500.00 to support approved Wastewater Infrastructure Projects for repairs and maintenance of the wastewater treatment system for the St. Thomas/St. John District; Harold G. Thompson Wastewater Treatment Plant was awarded \$310,000.00, Donoe Road Sewer Infrastructure Rehabilitation Design was



awarded \$10,000,000.00 and George Simmonds Wastewater Treatment Plant Replacement was awarded \$284,500.00, and thus far has received 25% (\$2,648,625). The Authority is in the process of finalizing the scope of work for these projects.

KEY ACCOMPLISHMENTS

- Hiring of key positions in the organization (Wastewater Operations Technical Manager and District Manager, Staff Engineer).
- Biobot Wastewater testing collaborating with DOH to continue providing COVID-19 data for the GVI by testing wastewater at 5 wastewater plants on all three islands. We will be adding an entire respiratory panel (COVID-19, Influenzas A&B, and RSV) and a high-risk substance panel (Nicotine, Cocaine, Methamphetamine, and Fentanyl) to our testing protocol in October. We are extremely grateful to DOH for their work with us to help expand our testing as the field of wastewater epidemiology continues to be critical in predicting health emergencies worldwide. All our testing data can be found on Biobot's platform: www.biobot.io.
- We have restructured and enhanced emergency management plans and processes to prepare the Authority for any potential future catastrophic events.
- Established a collaborative working relationship with the DOJ and other local and Federal agencies.

CHALLENGES

While the Authority has made great strides over the last year, some challenges remaining include:

• Maintaining Aging facilities and infrastructure: VIWMA's wastewater infrastructure is over 50 years old and most of the system has outlived its useful life. FEMA's approved prudent replacement for STX



and future approval for STT/STJ will help address this. Unlined landfills will be replaced by modern, subtitle D facilities.

• Lack of heavy equipment (i.e., excavators, bulldozers, compactors, etc.)

SUMMARY

The goal of the Authority and the Executive Team is to oversee our solid waste and wastewater operations in a more proactive/maintenance-based manner. However, we must have the appropriate funding available to support this vision. The grants and other available funding sources we discussed will and have assisted us with improvements. We are taking the necessary steps toward the goal of self-sufficiency by charging solid waste fees and a plan for proposed wastewater fees will be submitted this fiscal year, so the Authority can continue creating additional revenue streams.

I close by sincerely thanking the Authority's hard-working staff for their dedication and commitment to not only their day-to-day jobs, but in supporting the future vision of the Authority. I would also like to thank the Bryan/Roach Administration and the members of the 35th Legislature for their support as we continue to address the U.S. Virgin Islands issues public health and safety issues related to solid waste and wastewater collection, treatment, and disposal. This concludes my testimony, and my Team and I remain available to address any questions.

Thank you.