

LIBERIA MUNICIPAL WATER PROJECT II

Combined Year I and Quarterly Report 4

Redacted 1/18/2018 - for DEC upload



TETRA TECH

LIBERIA MUNICIPAL WATER PROJECT (LMWP) II

Combined Year I and Quarterly Report 4

October 30, 2017

Revised 20 November 2017

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

This publication was produced for review by the United States Agency for International Development by Tetra Tech, through Contract No. AID-OAA-I-15-00052, Task Order Number AID-669-TO-16-00008.

This report was prepared by: Tetra Tech 100 Nickerson Road Marlborough, MA 01752 USA Telephone: (508) 786 2200

 $\hbox{E-Mail: international.development} @ Tetra Tech.com$

Tetra Tech Contact:

, Chief of Party, @Tetratech.com

Cover Photo: View of Voinjama Water Treatment Plant Liberia, September 2017

All photos in this report are by Tetra Tech unless otherwise noted

TABLE OF CONTENTS

TABI	LE OF CO	ONTENTS	I
ACR	ONYMS	AND ABBREVIATIONS	!
I	EXECU ⁻	TIVE SUMMARY OF YEAR I ACCOMPLISHMENTS	I
		ROJECT BACKGROUND	
		EY ACHIEVEMENTS YEAR I	
		2.1 Task 1: Assist LWSC to Finalize and Implement an Institutional	
		Framework and Business Model for Sustainable Management of Wate	er
		Provision	
		2.2 Task 2: Construction Quality Assurance	
		2.3 Task 3: Transitional Management of Water Supply Improvements	
	1	2.4 Task 4: Capacity Building	5
		ask 6: Reporting and Planning	
2		ES ON ACTIVITIES AND ACCOMPLISHMENTS DURING YEA	
4	I	ES ON ACTIVITIES AND ACCOMPLISHMENTS DURING TEA	
	2.1 D	ETAILS OF ACTIVITES AND ACCOMPLISHMENTS BY TASK	
		I.I Task I: Assist LWSC to Finalize and Implement an Institutional	0
	2.	Framework and Business Model for Sustainable Management of Water	er
		Provision	
		I.2 Task 2: Quality Assurance Services	
		1.3 Task 3: Transitional Management of Water-Supply Improvements	
		1.4 Task 4: Capacity Building	
		1.5 Outreach, Project Cities Meetings	
		 stakeholders consultation meetings in YIQ4 Task 5: Coordination with Other Donor and Partner Programs during 	
	Ζ.	YIQ4	
	2.	I.8 Task 6: Planning and Reporting in YIQ4	
		1.9 Project Staffing, Management, and Administration	
3		ENGES AND OPPORTUNITIES	
	3.1 C	HALLENGES	. 33
4		IBUTIONS OF SHORT-TERM TECHNICAL ASSISTANCE	
5		PLAN FOR NEXT YEAR (YEAR 2)	
•		AIN ACTIVITIES FOR INSTITUTIONAL STRENGTHENING BY TASK	
		I.I Task I: Institutional Framework and Business Model	
		1.2 Task 3: Transitional Management of Water Supply Improvements	
		1.3 Task 4: Capacity Building	
	5.	I.4 Task 2: Anticipated CIP contruction activities	.38
6	PROCU	REMENT PLAN UPDATE	39
7	PMP INI	DICATOR RESULTS	40
8	FINANC	CIAL STATUS REPORT	43
9		ACT DELIVERABLES FOR YEAR I	
-		JMMARY OF INSTITUTIONAL STRENGTHENING ACTIVITIE	
AIIII		/ED DURING THIS YEAR I	
ΔΝΝ		STITUTIONAL STRENGTHENING ACTIVITIES TO BE	
A		MENTED DURING YEAR 2	52
ANN		JMMARY NOTES FROM STAKEHOLDER MEETINGS DURING	
ANN	-	PORT FOR LWSC ON SERVICE QUALITY IMPROVEMENT	
		TING FROM THE TWINNING WITH REGIONAL WATER	
	OPERA	TORS (NWSC ETC.)	57

ACRONYMS AND ABBREVIATIONS

4WLA 4 Week Look Ahead **AfDB** African Development Bank Board of Directors (LWSC) BoD CAO Communication and Outreach CIP Capital Improvement Project

Chief of Party COP

Contracting Officer's Representative COR

Cost of Service COS Deputy Chief of Party **DCOP DMD** Deputy Managing Director

Deputy Managing Director for Technical Services **DMD-TS EMMP** Environmental Monitoring and Mitigation Plan

Expression of Interest EOI

Environmental Protection Agency (Liberia) **EPA**

ePORT electronic Program Observation Reporting and Tracking

Environmental and Social Impact Assessment **ESIA**

GoAL WASH Governance Advocacy and Leadership for Water, Sanitation and Hygiene

Government of Liberia GoL

Head Office (LWSC) or Home Office (Tetra Tech) HO

HR **Human Resources**

Health, Safety and Environmental HSE

IDAMC Internally Delegated Area Management Contract

Initial Environnemental Examination IEE IIU Infrastructure Implémentation Unit Institutional Strengthening and Reform **ISR** International Water Association

IWA

LD Liberian Dollars

Liberian Hydrological Service LHS

LMWP USAID/Liberia Municipal Water Project

locd liters per capita per day Local Steering Committee **LSC**

LWSC Liberia Water and Sewer Corporation

M&E Monitoring and Evaluation

MD Managing Director

Ministry of Lands, Mines and Energy MLME

Liberia Ministry of Finance and Development Planning **MoFDP**

Liberia Ministry of Health and Social Welfare MoHSW MoPEA Ministry of Planning & Economic Affairs

MoPW Ministry of Public Works Memorandum of Understanding MOU

NGO Non-Governmental Organization National Strategy for the Development of Statistics **NSDS**

O&M Operation and Maintenance

Officer in Charge OIC OIT On-the-lob Training

NWRSB

OMC **Outstation Management Contract** Outstation Management Team **OMT PMP** Performance Monitoring Plan Project Management Team **PMT PMU** Project Management Unit

National Water Resources and Sanitation Board

POC Point of Contact

PPCC Liberian Public Procurement and Concessions Commission

QAC Quality Assurance Consultant
QA/QC Quality Assurance/Quality Control

QIP Quick Impact Project

QSIP Quality Service Improvement Program REOI Request for Expression of Interest

RF Results Framework
RFI Request for Information
RFP Request for Proposals
RFQ Request for Quotations

RFTOP Request for Task Order Proposal

SA Situational Analysis

SOP Standard Operating Procedure

ST Short Term

STTA Short-Term Technical Assistance

TAG Technical Advisory Group

TOR Terms of Reference

TWG Transition Working Group

USAID United States Agency for International Development

USG United States Government

UWSSP Urban Water Supply and Sanitation Program (AfDB)

WASH Water, Sanitation and Hygiene WHO World Health Organization

WSP World Bank Water and Sanitation Program WSSC Water Supply & Sanitation Commission

WTP Water Treatment Plant

I EXECUTIVE SUMMARY OF YEAR I ACCOMPLISHMENTS

I.I PROJECT BACKGROUND

Building upon the achievements of the Liberia Municipal Water Project (LMWP), funded by the United States Agency for International Development (USAID), the Liberia Municipal Water Project II (LMWP II) supports the construction execution and operation of water-supply infrastructure improvements in the project target cities of Robertsport, Sanniquellie, and Voinjama in Liberia. The LMWP II objective is to provide capacity building and institutional strengthening support to the Liberia Water and Sewerage Corporation (LWSC) and the relevant Government of Liberia (GoL) counterparts on the best way to implement the Institutional Framework adopted by LWSC. Support includes building the capabilities, business processes and systems necessary to successfully outsource the management and operation of the outstations to private operators. It is the goal of LMWP II to assist LWSC to establish improved water supply access in each city, with infrastructure managed and operated by locally based entities capable of sustaining the service both financially and technically. The improved water systems will provide public health and economic development benefits in the three target cities. During implementation of the project, LMWP II coordinates with the GoL including the LWSC; the Ministry of Lands, Mines, and Energy (MLME); the Ministry of Public Works (MoPW) and other ministries, agencies, and county and local authorities as necessary.

Tetra Tech and subcontractors are implementing LMWP II under USAID Contract No. AID-OAA-I-15-00052, Task Order #AID-669-TO-16-00008.

A specific component of LMWP II is to provide quality assurance services to USAID in respect of the Capital Improvement Project (CIP), awarded to United Infrastructure Projects (UIP). CIP is a construction contract to refurbish and upgrade the water treatment facilities, as well as to install new pipe distribution networks and water distribution kiosks in each of the three cities of Robertsport, Sanniquellie and Voinjama. LMWP II provides construction oversight and quality inspections as part of the quality assurance services to USAID, through on-site engineers based at each city, providing daily reporting to LMWP II offices based in Monrovia. Consolidated reporting on quality and compliance of work to meet technical specifications, health & safety, and environmental requirements are reported to USAID for consideration and action as appropriate.

This report is a combined Quarterly Report for the period July through September 2017 and Annual Report covering October 2016 through September 2017. It summarizes the activities completed during the first year of implementation of LMWP II project including accomplishments during the fourth quarter (Q4) of the project. It also outlines the planned activities for the second year (Y2), covering the period of October 2017 to September 2018.

1.2 KEY ACHIEVEMENTS YEAR I

1.2.1 TASK 1: ASSIST LWSC TO FINALIZE AND IMPLEMENT AN INSTITUTIONAL FRAMEWORK AND BUSINESS MODEL FOR SUSTAINABLE MANAGEMENT OF WATER PROVISION

Key activities carried out under Task I during Year I include:

Facilitated the <u>Institutional Framework Review</u> on January 30, 2017 which was attended by members of the Board of Directors (BoD) and senior management of LWSC, representatives from the Ministry of Finance and Development Planning, State Owned Enterprise Unit (MFDP (SOE)), USAID and LMWP II and support LWSC to reaffirm the commitment to implement the Institutional Framework for sustainable management of the outstations as agreed in the Memorandum of Understanding (MOU) signed on 25 August 2015. LWSC signed a letter on June 1, 2017 reaffirming their commitment to the MOU and Institutional Framework.

-1

Facilitated and worked with LWSC to develop and finalize the <u>Roadmap Plan</u> for reaching cost recovery with the support of LWSC senior management and the BoD. The LMWP II and the LWSC achieved consensus and the Roadmap was endorsed/approved by the management of LWSC on September 20, 2017 in consultation with the LWSC BoD.

Supported the <u>Business Process Review</u> of the outstations model analysis for sustainable financial management including the financial and business model, the cost of service model and tariff analysis. Supported and facilitated the revision of the Cost of Service Model (COS) to incorporate asset depreciation, and the orientation of the DMDs and relevant department's staff. An output of this process includes the simulation of preliminary tariff for the outstations.

Facilitated and worked with the LWSC and the MoFPD during the annual budget development process <u>secure GoL financial commitments</u> regarding the subsidies of the operations of the outstations in the interim and for the first two months after the completion of the capital works.

Supported LWSC to prepare and issue an <u>Expression of Interest (EOI)</u> for potential private operators, to solicit interest to bid for the Outstation Management Contract to operate the facilities on handover. Assisted the development of the Standard Operating Procedure (SOP) and Evaluation Criteria for the evaluation of the EOI responses and facilitated the evaluation of the applications submitted by the potential private operators. The Evaluation Report recommended four bidders out of eight respondents to proceed to the RFP stage.

Assisted LWSC to develop and finalize the draft <u>Outstation Management Contract (OMC)</u> to be included in the tender package for solicitation of the private operators in collaboration with LWSC BoD and Legal Counsel.

Facilitated <u>LSC/LWSC Charter Workshops</u> in the three cities between LWSC and the LSCs on February 17, 21 and 23 to review the implementation of the charters governing the relationship and collaboration between the stakeholders in relation to the implementation of the project.

Supported the development and finalization of the <u>LSC Work Plans</u> and budget in collaboration with LWSC for the project cities on April 13, 2017. These annual Work Plans and budgets were approved for implementation.

Facilitated <u>LSC/LWSC Charter Extension</u> for the next two (2) years effective July 3, 2017 for the three cities. The Charter between LWSC and the LSCs governs the relationship and collaboration between the stakeholders in relation to the implementation of the project.

1.2.2 TASK 2: CONSTRUCTION QUALITY ASSURANCE

During this reporting year, LMWP II provided the USAID Liberia Mission with independent Quality Assurance services for the Municipal water supply system construction in Sanniquellie (Nimba County), Voinjama (Lofa County) and Robertsport (Grand Cape Mount County) in Liberia. This included support and provision of training to LWSC staff to assure proper and sustainable management of the infrastructure.

LMWP II QAC responsibilities to assist USAID included ensuring that the CIP construction work complies with the technical documents included in the construction contract issued to UIP. This also includes any approved variations and modifications, to be completed within the approved works period of performance and remains at a verifiable cost. QAC provides support to USAID for review and approval of construction shop drawings and provides additional information as needed by the CIP Contractor. Additional responsibility was to record and provide relevant supporting documentation to assist USAID in negotiations with the CIP Contractor in response to a potential claim.

LMWP II management team was mobilized during the Q1. The Chief of Party, and Deputy Chief of Party/Lead Engineer, arrived in country on October 16, 2016. The new team took over CIP construction Quality Assurance activities from LMWP I. During this first year of the LMWP II project, the CIP construction progressed to 68 percent representing a monthly incremental progress rate of 3.78 percent. The percent time elapsed since the startup of construction in March 2016 is 75.47 percent. The detailed progress rates are contained in Table 2, "Detail Completion Rates for Constructions in Voinjama (VNJ), Sanniquellie (SNQ) and Robertsport (ROB)", in section 2.1.2 below.

Specific achievements include:

- Water Treatment Plant: WTP Site Improvements works, installation of the 450 m chain-link, and personnel gates were completed during the reporting year period
- Civil works for slow sand filters in SNQ and VNJ and the rehabilitation of the existing slow sand filter in Robertsport were completed. Pending works include installation of the Sand Filter pipes, grates, rails and installation of the sand and gravel filter media
- The water distribution pipeline in Robertsport was completed
- The Mini Water Systems at both Sanniquellie and Voinjama were completed and LWSC commenced sale of water on November 20, 2016. USAID issued the certificate of substantial completion for the four Mini Water Systems on April 12, 2017 to trigger the start of the one-year warranty period
- Construction of the High-Density Kiosks (seven in Voinjama and three in Sanniquellie) was completed
- Eight river bank filtration boreholes in VNJ and SNQ (four in each site) were completed and equipped, however their capacity will be tested by January 15, 2018
- The photovoltaic (PV) solar system pedestals are completed and awaiting installation of solar equipment which is scheduled to be delivered to site on October 31, 2017. The construction of the standby generator concrete pad, the fuel containment and the installation of Fuel Tanks were completed as well

1.2.3 TASK 3: TRANSITIONAL MANAGEMENT OF WATER SUPPLY IMPROVEMENTS

Provided continued direct technical assistance to LWSC in the interim operation, maintenance, and management of the three outstations with the implementation of the <u>Mini Systems O&M Manual</u> for operations in SNQ and VNJ, as well as oversight in the application of the <u>Pipeline Extension O&M manual</u> developed for Robertsport Operations, submitted under LMWP I.

Supported LWSC to start the implementation of the <u>Water Quality Monitoring Plan</u> in Sanniquellie and Voinjama, using the testing kits provided under LMWP I whilst providing guidance to LWSC with regards to the water quality standards. LMWP II also continued the implementation of the water quality assurance plan in Robertsport. Samples are taken and tested each day at each city to ensure that the treated water meets the required standards.

Worked with the LWSC management and the BoD in consultation with the LSC to endorse and implement the Robertsport Tariff Adjustment from 20 LD to 5 LD per jerry can effective June 1, 2017, because of the representation by the Robertsport Community through the LSC to LWSC HO. This reduction resulted into a three time increase of the volume of water sold, from 56,000 for June - September 2016 to 158,000 gallons for June - September 2017.

Carried out in coordination with LWSC, the <u>Bi-Annual Audits</u> for each outstation for the financial, technical performance during the period of performance.

Provided support and facilitated the <u>Outstation Business Plan Review</u> workshops to develop and adopt the Local Business Plans (FY 2017/2018) for the Robertsport, Sanniquellie and Voinjama cities. LMWP II, LWSC and the LSCs achieved consensus on the performance targets (2017/2018).

Assisted LWSC to continue the Monthly Sustainability Monitoring Evaluation and Feedback Meeting process throughout this year. The outstations are expected to break even during the first two years of operation, after the completion of the CIP, depending on a series of decisions taken by LWSC. See Section 2.1.3 Sustainability Monitoring for more details.

LMWP II supported the LSCs to continue their <u>Basic/General Community Outreach and Awareness</u> <u>Campaigns</u> in the three Cities; and the LSC/LWSC in these cities continued to proactively engage the community on safe water supply and construction HSE, and address project/community related matters throughout town hall and community meetings, the result of which is evident through the sale of water. Provided support and facilitated LWSC to finalize their Work Plans and budget for community sensitization / awareness and outreach campaigns for the CIP. Table 7 below highlights the level of participation of the local community during town hall meetings and the outreach campaigns. The total number of participants attending outreach activities for Q4 was 203 persons. The tangible results of this basic community socialization campaign is the level of cooperation, coordination and support provided by the local community during the CIP construction phase. This activity has been key to solve potential conflicts between the community and the contractor, as well as providing awareness regarding health and safety issues, which has resulted in no major accidents or injuries in the three cities, as a consequence of the construction activities taking place in the community. The other tangible result of the awareness campaign is the volume of water sold through the new mini systems in Voinjama and Sanniquallie being 70% and 60% of target for the month of Septembe r2017 for the end of the rainy season when sales are traditionally low. For Roberstport, the volume of water sold has increased from 8,100 gallon to 29,200 gallons sold in September 2016 and 2017 respectively.

Continued direct support of LWSC through the provision of <u>Technical Assistance</u> (capacity building) to the LWSC field offices in the implementation of their tasks. The site engineers have access to the LMWP II office facilities including transportation to facilitate their work while the LWSC facilities are under rehabilitation; and the LMWP II Resident Engineers continue to provide hands-on training/mentoring of the Site Engineers on management of construction works.

Supported LWSC and the MoFPD to monitor the implementation status of the <u>Performance Contract</u> and assisted LWSC to prepare and submit the Quarterly Performance Reports.

Facilitated the development of the draft **OMC** template for review by LWSC senior management.

As part of the business plans development, LMWP II supported LWSC to include <u>The Subsidy</u> <u>Required</u> in the interim and for the initial operations into the LWSC annual budget for GoL which was approved by the Ministry of Finance in approval August 2017.

Continued to support LWSC to establish <u>a Private Individual Connection and Financing Strategy</u>, as part of the communication and outreach plan. The LMWP II provided to LWSC the estimated cost associated with private connections which is high; and therefore, proposed an amalgamation approach to communities (potential customers) to reduce cost of private connections.

1.2.4 TASK 4: CAPACITY BUILDING

Supported and facilitated the practical <u>On the Job Training of LWSC Field Engineers</u> based at the sites in construction management, environmental compliance, infrastructure construction quality assurance and standards. LMWP II also provided logistical support to the LWSC engineers to enable them to report progress and issues to the LWSC management in the Head Office.

Facilitated the development of the consolidated <u>LWSC Capacity Building/Training Plan</u> (USAID/LMWP II, AfDB/UWSSP and LWSC). See section 2.1.4 for more details.

LMWP continued to support and facilitate the development of a <u>Communication and Outreach Plan</u> for the three cities. The draft Social Marketing Strategy has been completed and circulated internally, and the LMWP II and LWSC achieved consensus to engage a STTA for the finalization of the strategy and development of the CAO plan for implementation. The SOW for the technical assistance/consultancy was finalized, and endorsed/approved by the LWSC management.

1.2.5 TASK 5: COORDINATION WITH DONORS/STAKEHOLDERS

During the LMWP II Year I, a total of fifty-two (52) coordination and strategic program meetings were held with key stakeholders from LWSC, the LSC, and Local Government for Project Cities of Robertsport, Voinjama and Sanniquellie. These include predominantly strategic program meeting with the LWSC senior management and relevant departments, the LWSC BoD Chairman and standing committees (Finance and Governance), and Ministry of Finance and Development Planning (MFDP) SOE unit. For the first LMWP II quarter, most of the meetings were introductory/relationship development meetings centered on the presentation and discussions on the LMWP II objectives, ways of working and expectation from the stakeholders. The strategic meetings were held predominantly to address strategic project related matters of concerns. Most of these meetings centered on assisting the LWSC to finalize and implement an Institutional Framework and business model for sustainable management of the water improvements, to include the business process review, the Roadmap for cost recovery, the cost of service model, and orientation of LWSC senior management to the LMWP II objectives. The project coordination meetings were focused on implementation of project activities including progress of construction work; outstanding actions from the monthly Sustainability Monitoring Reports; progress report for the Performance Contract; and the joint capacity building review. Other key achievements of the coordination activities are summarized in the table below.

Table I. Stakeholder Coordination Summary

Type of Meeting		No. of	f M ee	tings		Highlights	Target	Outcome
Type of Meeting	QI	Q2	Q3	Q4	Т	Tilgilligiles	Audience	Outcome
LMWP II/LWSC Project Coordination and Routine Meeting	3	3	5	3	14	LMWP II Updates, CIP Construction Updates, Outstations Operations Updates and Communications and Outreach Updates	LWSC DMDs (TS, Admin), Director- Operations, Outstation Department, PIU Manager	Project Update and Addressing Outstation Operations and Management Challenges
LMWP II/LWSC Strategic Programmatic Meetings (Institutional Framework, Business Plans, Cost of Services, OMC, EOI)	0	5	10	7	22	OMC Procurement Review, Business Process Review, Business Plans, Capacity Building Plans	LWSC MD, DMDs (Finance, Technical Services, Administration) Procurement Manager and Sales and Marketing Manager	Final Draft OMC Developed, COS Model, Capacity Building Plan, Business Plans Finalized, Roadmap Adopted, Institutional Framework re- Affirmed
LSC/LWSC/LMWP Stakeholder Meeting: Communication and Outreach		5	4	10	20	LWSC/LSC Community Engagement, LWSC/LSC Collaboration the Past Quarter, and LSC Annual Work Plan Review	LWSC Outstation Superintendent, OICs and/or Site Engineers, and LSCs for each Target City	Level of LWSC/LSC Collaboration Reviewed, Review of LSC/LWSC Activities for the CIP, Communication and Outreach Campaign; and Commencement of the LSC Approved Annual Work Plan
Joint Monitoring, Evaluation and Feedback Meeting	0	3	3	3	9	Outstations Performance Review	LWSC Outstation Superintendent and OICs and/or Site Engineers, and LSCs for each Target City	Progress is Measured; and Provide Feedback and Corrective Actions
Total	4	16	22	23	65			

Other critical coordination achievements and accomplishments achieved during the course of Year I are listed below.

The LMWP I Transitioned to LMWP II October 2016. Completed <u>Introductions of the New COP</u> and Lead Engineer to the Liberia Water & Sewerage Corporation (LWSC) Board of Directors and senior management staff

- LMWP II and LWSC achieved consensus for assignment of a <u>Focal Person</u> to serve as project spokesperson or champion within the LWSC. The LWSC nominated James Gaye/Outstation Manager as LWSC Focal Person to serve as principle coordinator for LMWP II
- Worked with the MoPW and LWSC; and facilitated the issuance of the Sanniquellie N19 alignment notification to MoPW to commence the construction of the water main

For a detailed list of the coordination meetings, refer to Annex C.

TASK 6: REPORTING AND PLANNING

The <u>Work Plan for Year 1 with EMMP</u> was approved on March 27, 2017 with the <u>Monitoring & Evaluation Plan</u> approved on February 9, 2017.

The <u>Work Plan for Year 2</u> was submitted on the August 28, 2017 to the USAID Contracting Officer's Representative (COR) for review. It was revised and resubmitted on October 12, 2017 to include COR's comments and is awaiting final formal acceptance.

A <u>Monthly Construction Progress Report</u> is submitted to the LMWP II COR and CIP COR, with an additional weekly summary report also submitted to assist the CIP COR to consolidate issues for resolution with UIP prior to the bi-weekly CIP progress meeting.

Beginning at the end of May 2017, a <u>Monthly Schedule Analysis Report</u> is now also submitted to the LMWP II COR and CIP COR in order to review the actual progress of construction work indicated in the revised schedule, against actual progress.

A <u>Monthly Sustainability Monitoring Report</u> is submitted to USAID to assess outstation progress toward achieving the performance targets set for the outstation of the period. In addition, a bi-annual Outstation Audit Report is also developed to verify the accuracy of the Performance Reports.

The table in Section 9 of this report, "Contract Deliverables for Year I," provides CIP construction reports submitted to USAID during this reporting year.

2 UPDATES ON ACTIVITIES AND ACCOMPLISHMENTS DURING YEAR I

2.1 DETAILS OF ACTIVITES AND ACCOMPLISHMENTS BY TASK

2.1.1 TASK 1: ASSIST LWSC TO FINALIZE AND IMPLEMENT AN INSTITUTIONAL FRAMEWORK AND BUSINESS MODEL FOR SUSTAINABLE MANAGEMENT OF WATER PROVISION

INSTITUTIONAL FRAMWEWORK REVIEW

LMWP II facilitated a retreat on January 30, 2017 to bring together key stakeholders and parties of the proposed Institutional Framework to agree upon the proposed framework and the next steps required to put the framework into practice. In summary, all the stakeholders present reached consensus and agreed on the proposed Institutional Framework that was previously signed under a Memorandum of Understanding on August 25, 2015. Subsequently, the final agreed upon Institutional Framework was reaffirmed by the LWSC in collaboration with the BoD on June 1, 2017.

ROADMAP FOR REACHING COST RECOVERY

LMWP II worked with the Liberia Water and Sewer Corporation (LWSC) to develop the Roadmap for cost recovery, which includes a timeline and series of steps culminating in the signing of management contracts for each city in advance of completion of construction with staff and systems in place to ensure sustainability and minimize the time required to reach cost recovery.

The initial draft of the Roadmap was submitted to the LWSC management and LWSC Board of Directors for discussions on June 1, 2017. After a series of strategic planning, feedback meetings and discussions which provided the opportunity for LWSC senior management to review the Roadmap to include the conditions of completion of each step and at the same time creating and enhancing a thorough understanding amongst key stakeholders.

The Roadmap includes two phases. The first phase leads to the commencement of operations at the three facilities, while Phase 2 relates to the operation and maintenance phase and the annual cycle of tasks for LWSC to adopt to reach cost recovery.

After LMWP II and LWSC reached an agreement on the final Roadmap for Cost Recovery, the Roadmap was submitted for LWSC senior management for formal approval on September 1, 2017.

The final Roadmap was adopted by LWSC for implementation on September 20, 2017.

BUSINESS PROCESS REVIEW

To assist LWSC in delivering the institutional framework, LMWP II in collaboration with LWSC has conducted a financial and business analysis outlining key policy/business choices and projections for reaching Cost Recovery. These include the following:

- Cost of Service Model a mathematical tool used to identify all associated costs and anticipated sales, to define a tariff.
- Business Models analysis to assess the likelihood of connections based on willingness to pay and ability to pay, to establish basic assumptions for incorporation into the Cost of Service Model
- Tariff Analysis
- Marketing and Outreach Campaigns

During Year I, through a series of meetings with the Finance Committee Chairman of the BoD, the Deputy Director for Finance and the Sales and Marketing Director, LMWP II facilitated the revision of the Cost of Service Model to adjust key assumptions, revenue and cost projections. The Business Process Model was reviewed with the BoD members on July 7, 2017; following which the model was further reviewed and adopted by the LWSC during strategic working sessions with the Finance Department.

Thus, LWSC gained a better understanding of the Cost of Service Model developed for the three cities and gain ownership of the tool as part of the strategic decision tool.

SUPPORT LWSC TO ENSURE FINANCIAL COMMITMENTS OF THE GOL REGARDING SUBSIDY OF INITIAL OPERATIONS

LMWP II worked with LWSC and the Ministry of Finance and Development Planning (MFDP), State Owned Enterprises (SOEs) Unit during the annual budget development process to include the budget required for the outstation operations and oversight during the fiscal year 2017/2018.

LMWP II assisted LWSC in developing local business plans for the outstations during the interim period of June 2017 to April 2018 and for the CIP system operations from May 2018 to June 2018. The budgets included in the business plans were submitted to GoL for allocation in the GoL annual budget.

EXPRESSION OF INTEREST TO OPERATE THE OUTSTATIONS

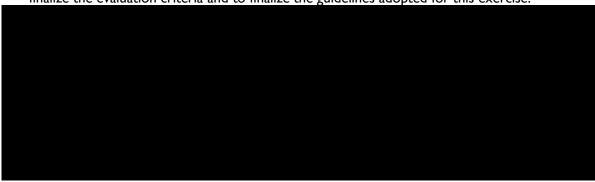
In order to identify interested private companies to operate the outstations in the three cities, LMWP II help LWSC to develop an EOI which was advertised in the local press on April 17, 2017. At the closing date on May 17, 2017, there was only one respondent that expressed interest in the operation management of the water utilities. After consultation with LWSC it was agreed to extend the closing date of the EOI while LMWP II facilitated an Open Hall Meeting about the new opportunity for the Liberian companies. Following the second publication and as of August 7, 2017, LWSC received a total of eight (8) business enterprises comprising of the Liberian Construction Contractors and the Liberian Water Producers companies/businesses who expressed their interest to operate and manage these water facilities as "private operator" under an Outstation Management Contract (OMC). The respondents to the EOI include the following:

- Liberian Water Producer
 - Mask Investment Limited
 - Vianga Janitorial and General Services Inc.
 - Able God Venture Inc.
 - o Twin Business Group Inc.
 - Pump and Tank Maintenance Company
 - Peace and Development Outreach Venture
- Construction Firms/Business:
 - o Amuchin Engineers and Public Safety Groups
 - o Global Construction Corporation.

To support transparency in the procurement process, LMWP II served as a non-voting observer during the evaluation process. Objectives of this participation and advice provided to the LWSC Procurement staff, was to ensure that the evaluation process was not utilized to disqualify a technically capable bidder, in preference for a lower capable bidder, as well as to ensure that the evaluation committee members were consistent in their evaluation marking, and so reduce any questions raised by the LWSC Procurement Committee or the Public Procurement and Concessions Commission (PPCC), who are the responsible body in GoL for oversight of the application of the public procurement regulations. The following steps were followed

• LMWP II assisted LWSC to develop and adopt the Terms of Reference (TOR) and the Standard Operating Procedure (SOP) for the EOI Evaluation Committee.

• On August 9, 2017, LMWP II facilitated and worked with the Evaluation Committee to finalize the evaluation criteria and to finalize the guidelines adopted for this exercise.



The next steps will include the endorsement of the evaluation report leading to finalization
of the potential bidders that are qualified to submit an offer during the next stage of the
procurement of the services. The completion date of the above step is scheduled for
November 7, 2017.

TENDER PACKAGE FOR THE SOLICITATION AND SELECTION OF PRIVATE WATER UTILITY OPERATOR

LMWP II supported LWSC in the development of the OMC, which will form part of the tender package for the solicitation and selection of a private Water Utility Operator.

Through a series of meetings and working sessions the draft OMC was reviewed by the various departments to include their comments and input.

The next steps will include the finalization of the tender package for issuance and evaluation of the responses.

LSC/LWSC CHARTER WORKSHOPS – CONSULTATION WITH THE LSC, LWSC AND OTHER STAKEHOLDERS

The LWSC/LSC Charter Workshops (a consultation with the LSC, other LWSC stakeholders) were held February 17, 21 and 23, 2017 in Robertsport, Sanniquellie and Voinjama respectively. The various workshop sessions reviewed and re-orientated the stakeholders on the tenants of the LSC/LWSC Charter, including the roles and responsibilities of the key stakeholders, i.e. the LSC and LWSC; reviewed the activities of the LSCs in coordination with LWSC during the ongoing construction phase to capture the extent of collaboration between the stakeholders; and reviewed the support for the various stakeholders during the ongoing CIP construction phase. The workshops also provided an opportunity for LWSC and LSC to convene and jointly review their activities to develop the LSC Work Plan in collaboration with the LWSC.

DEVELOPMENT AND IMPLEMENTATION OF LSC/LWSC CHARTER WORK PLAN – VOINJAMA, SANNIQUELLIE AND ROBERTSPORT CITIES

Implementation of Work Plans - The sets of quarterly work plans for project cities were developed and finalized in YI Q2. These Work Plans and associated budgets were subsequently submitted to USAID on April 13, 2017 for review prior to implementation. Upon USAID's approval during the quarter under review, the implementation of the Work Plan started during the third quarter and continued throughout the remainder of Year I.

The activities that form part of the first three months included: 1) Town Hall Meeting; 2) Public service announcement at the local radio stations in English and the various local languages; and 3) Community

outreach and awareness exercises. Specific talking points included the following: safe water supply; the CIP construction and community health and safety; pipeline extension, and private house connection; and tariff and Mini System/kiosks protection and maintenance.

2.1.2 TASK 2: QUALITY ASSURANCE SERVICES

During YI Q4, LMWP II continued to undertake Quality Assurance activities and provide advisory services to the USAID Liberia Mission for the municipal water supply system construction in Sanniquellie, Voinjama, and Robertsport.

The QA oversight of the water systems required experienced engineers at the three local project sub offices. Three engineers are assigned to each site including one International Engineer assigned to Voinjama and Sanniquellie sites.

Each of the three locations is also supported by a seconded local LWSC Engineer. The LMWP II engineers provide QA services for the CIP construction works by observing and measuring the works against the contract scope of work, approved schedule, drawings, and technical specifications; by tracking and documenting construction work, receipt of materials and equipment; and inspecting completed construction works to provide equitable work verification for the CIP Contractor's invoices. They performed daily on-site activities, which included, but were not limited to:

- Visual inspection of work at the site, including recording measurements and collecting photographic evidence
- Daily site inspection and reporting of construction works ensuring that the CIP Contractor complies with the drawings and technical specifications
- Receipt and processing of the CIP Contractor's Requests for Work Inspection, Testing and Surveying on a daily basis
- Inspection of materials delivered to site ensuring that they are as per approved material submittals, technical specifications, or shop drawings
- Inspection of concrete batching and sampling for crushing test, and analysis of the characteristics of material such as sand sieving and gravel type
- Inspection of Cone Penetration Tests to determine the bearing capacity of the existing subgrade at the slow sand filter and sand cleaning pad sites
- Perform daily checks of the CIP Contractor's work to ensure compliance with the approved technical specifications and Quality Assurance (QA) requirements, Environmental Management & Monitoring Plan, and H&S Plan components
- Create control documentation including inspection reports, photos, procurement and schedule assessment reports
- Checking of materials and equipment on site and identifying critical shortages that will hamper work progress
- Identify and report deviations from the contract scope, drawings, or technical specifications;
- Continue measuring of stream flow and rain gauge reading
- Monitoring the operation of the two Mini Water Yards and conducting daily water quality tests by LWSC

The following Table 2 provides details of accomplishments for Q4 in the three cities.

Table 2. Detail Completion Rates for Constructions in Voinjama (VNJ), Sanniquellie (SNQ) and Robertsport (ROB)

	Structure	Site Name	July 2017	Aug 2017	Sept 2017
I	Quick Impact 2 Mini Water	VNJ	100%	100%	100%
	Yards	SNQ	100%	100%	100%
		ROB	-	-	-
2	Water Line	VNJ	74.38%	79.63%	85.19 %
		SNQ	95.03%	95.90%	98.20 %
		ROB	100%	100%	100%
3	Intake Pumps/Structure	VNJ	18.36 %	45.01%	45.45%
	Improvements	SNQ	22.27%	45.50%	46.93%
		ROB	61%	61%	61%
4	Water Treatment Plant	VNJ	56.52 %	66.98%	68.92 %
		SNQ	49.67 %	60.77%	62.43%
		ROB	53.36%	60.46%	53%
5	Elevated Water Tank/Reservoirs	VNJ	61.05 %	61.53%	61.53%
		SNQ	62.93 %	62.93%	62.93%
		ROB	80.65%	81.20%	81.20%
6	Solar Power System ¹	VNJ	41.62 %	41.98%	41.98%
		SNQ	37.1 %	39.77%	40.71%
		ROB	54.57%	55.22%	55.22%
7	Standby Generator	VNJ	36.87 %	36.87%	41.98%
		SNQ	36.89 %	36.89 %	36.89%
		ROB	31%	31%	31%
8	High Density Kiosks	VNJ	98.15%	100%	100%
		SNQ	99.55%	100%	100%
		ROB	N.A.	N.A.	N.A.
9	Standard Kiosks	VNJ	100%	100%	100%
		SNQ	100%	100%	100%
		ROB	100%	100%	100%

-

¹ The construction work done under this Solar Power System line-item consists of the land clearance, fencing and pedestals construction work.

CIP CONSTRUCTION STATUS IN SANNIQUELLIE

The Sanniquellie QA team provided continuous monitoring and inspection of all construction activities on the site and the following was accomplished:

- Mini Water Yards \$43 & \$55: The Mini Water Yards were substantially completed, and USAID issued the certificate on April 12, 2017 to trigger the start of the one year Warranty period. The Mini Systems continued normal operation this quarter. LWSC installed metal grates for protection of solar panels against burglars at two of the four Mini Water Systems
- Public Standard Kiosks: construction of the 15 Standard Kiosks is completed
- Water Treatment Plant (WTP): The WTP site improvements are 62 percent complete. WTP
 Site Improvements works, installation of the 450 m chain-link and personnel gates were
 completed during the reporting period. Construction of drain piping, manholes and septic
 tank reached 82 percent. Rehabilitation of the WTP Building including electricals reached 99
 percent. Pending works include installation of pumps in pump house, construction of cascade
 aerator, piping works and installation of the dosing system
- Intake Structure: overall the water intake rehabilitation is 46.95 percent. Major outstanding work is the installation of intake pumps
- Battery Room Building: The Contractor continued the construction works of the battery building and progress is estimated at 95 percent. Wall painting and landscaping around the building were completed. The electrical fittings installation was completed as well
- Slow Sand Filter: The slow sand filter is 96 percent completed. Pending works include installation of sand filter pipes, grates and rails.
- Sand Cleaning Pad: Concrete works commenced and were completed during this reporting period. Contractor pursued delivery of the sand filter media to the WTP site
- Stream Gauging Station: The Contractor commenced and completed the construction of the stream gauge manhole. Construction of the river trench for stream gauge equipment is in progress. Overall, stream gauging station construction works are estimated at 68 percent complete
- Standby Generator: Construction of the generator concrete pad, fuel containment and installation of fuel tanks were completed. Procurement of the generator still pending. Status reached 37 percent completion
- Riverbank Well/Pumping: Drilling of the four wells, placing of well casing/screens and concrete
 casting of well apron commenced during the previous quarter period. Present level of
 completion is still 75 percent. Pending works include testing for yield, connection of pipes
 and testing/commissioning of the electro-mechanical system
- Pipeline for Water Transmission & Distribution: Excavation works for the water transmission pipeline and distribution mains commenced in December 2016 and approximately 47,173 linear feet of pipe are installed. Installation of fire hydrants and gate valves commenced in March 2017, and was completed as of September 30, 2017. Water pipeline installation works are estimated 95 percent complete

Issues and Remedies

Some of the issues identified in Sanniquellie during the Q3 included:

- Delivery of Materials: Delays were observed in the delivery of water pipeline materials and pipe fittings for the transmission and distribution water mains. Upon QAC advice, the CIP Contractor has started to submit a detailed procurement and delivery plan, updated for each bi-weekly meeting for better visibility on upcoming activities at the site
- Effectiveness of the Silt Barrier Preventing Soil Erosion and Intake River Siltation: UIP was advised to replace the silt barrier in view of the rainy season that has already started
- Community Complaints at Excavated Areas Near Residences: The community complained of excavated trenches preventing them from accessing their residences and becoming a health

and safety hazard. UIP was advised to provide temporary crossings and to expedite the backfilling of pipelines



- Ductile Iron (DI) pipes are misaligned with their concrete column supports on Compound and Gono Streets. The contractor was advised to correctly align the DI pipe along the concrete column supports
- Water Pipelines:
 - QAC recorded contractor's non-compliance with the technical specification on about 4080 feet of pipe laying and trench backfilling for main water lines.
 - The condition of area for eight-inch PVC installation along the Connection Street was too muddy and clogged with water during this period of rainy season.

 Contractor was placing the two-inch crushed stone bedding material on mud clogged with water. Area for installation too muddy during this rainy season. The QAC advised that continuous installation of the pipe should be halted until the area is dry enough for pipe installation.
 - The bolts for DI pipe elbows at all the culvert crossings along the SNQ water pipelines are gradually rusting. The Contractor is advised to apply rust-inhibitive primer coating on all bolts to prevent further rusting.
 - UIP commenced installation of the eight-inch PVC pipe along the Connection Street from the fire hydrant near the Lake Teleh at the Bridge toward the culvert location at km 230. However, the QAC team noted that the material used for backfilling does not meet the technical specifications. Contractor advised to remove noncompliant backfill material.
 - UIP installed the six-inch PVC pipeline along the Tank to Mini Water Sys S43 Line route. However, due to rock encountered at approx. station 24+50 (Ref. dwg. C-S124), the Contractor installed several elbows to avoid the rock. Contractor is advised to correctly align the PVC pipe as per the design along the proposed route.

CIP CONSTRUCTION STATUS IN VOINJAMA

This quarter, CIP construction in Voinjama has been focused on the construction of the slow sand filter and the water pipeline. Below is the level of completion of the major infrastructure works:

- Slow Sand Filter: Concrete casting of influent channel, top slab was completed this quarter. All the concrete work of this structure is 100 percent complete
- Solar system: Construction of solar panel concrete foundation and gravel field pavement are 100 percent complete
- Generator Fuel Storage Tank: Two 1500-gallon capacity fuel tank for the standby generator installed
- Battery Storage and Control Room: Construction of slab-on-grade, battery concrete pads, and interior CMU partition is 100 percent complete
- Elevated Water Storage Tank: Installation of chain-link fence fabric and gate, installation of metal doors and aluminum louvers, repair of concrete top slab, and application of epoxy paint inside the tank are 100 percent complete. Remaining work includes installation valves and connection to the new pipe network. Overall, the works is 62 percent complete

- Riverbank Wells: Installation of four submersible pumps is 100 percent complete. Remaining work includes pipe connection to WTP Building and installation of power supply wiring and control system
- Seven High Density Kiosks: two-inch PVC pipes, valves, flow meters, and faucets in all kiosks
 were installed in all kiosks. The extension of the height of the chain-link fence to comply
 with the requirement in the drawings was also completed this quarter. The seven kiosks are
 now 100 percent complete
- Eight Standard Kiosks: Interior piping was installed as well as the ball valves and connection of the two-inch pipes to the water main
- Main Water Lines: The contractor decided to stop all pipe installation work in August due to heavy rains, lack of supply of sand bedding and shortage blanket materials. The construction of thrust blocks and bollards and pressure testing continued. Overall, the main water lines is now 85.19 percent
- Rehabilitation of WTP Building: Rehab 69 percent completed. The following works are ongoing: installation of doors and windows, handrails, hatch, ladders and toilet fixtures
- Intake Structure: Installation of hoist, handrail, and ladder is 85 percent complete

Issues and Remedies

The following are some of the issues in Voinjama during this quarter:

- Despite repeated advice from QAC, the Contractor failed to stockpile sufficient quantity of sand for pipe bedding and blanket. The water level at the source is now very high due to high intensity rainfall during this quarter. In some sections, the Contractor used unsuitable alternative pipe bedding and blanket material which QAC rejected. The Contractor decided to postpone all pipe installation work during this rainy season
- QAC recorded Contractor's non-compliance with the technical specification on about 6000 feet of pipe laying and trench backfilling for main water lines. In some sections the Contractor laid pipes without proper dewatering of the trenches. The Contractor also backfilled some trenches without compaction or inadequate compaction per layer. The Contractor will rectify these issues during the dry season
- Mini System V18 and V35 are situated in the Kintoma and Telbomai communities, where burglars target the solar panels. LWSC, at their own cost, has installed metal bars for the protection of solar panels. Contractor installed additional light fixture at the rear of Mini Water Yards facing the solar panels for security. Door and window canopies were also installed to prevent rainwater from dripping into the battery storage room and the operator's room
- The exterior paint in some structures is flaking off. The Contractor was instructed to redo the painting after the cause of the paint failure was identified. The Contractor will rectify the painting during the dry season
- UIP completed the repair of honeycombs on the concrete walls of the slow sand filter as per the approved repair method statement (Shop Drawing 0058C)
- The shortage of supply of sand bedding material continued. There were instances that the Contractor attempted to use sand bedding material that contains considerable amount of clay and silt. QAC rejected the use of those materials

CIP CONSTRUCTION STATUS IN ROBERTSPORT

During this reporting period CIP construction activities progressed to reach 82 percent from 78 percent for the previous quarter. However, material delivery on site continued to be slow.

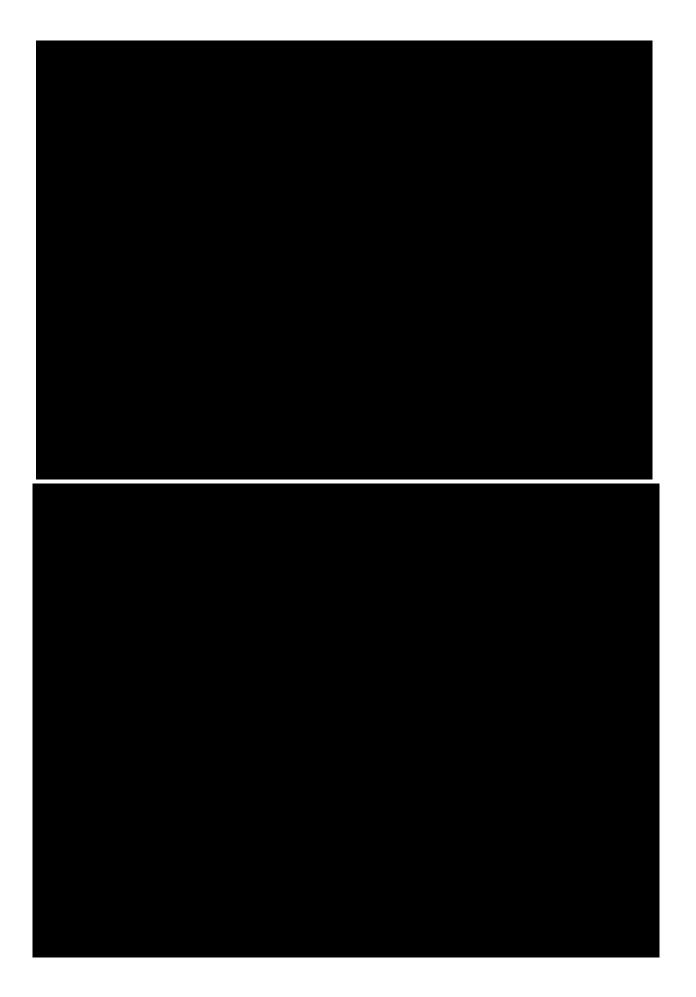
Below is a summary of progress:

- Standard Kiosks: The work progressed to 100 percent during this period, with the installation of roof waterproofing material, valve box and flow meter
- Intake Access Road: Works have progressed to 100 percent this reporting period
- Battery Storage House: Outstanding electrical PVC conduits in the battery storage room were completed. Casting of the battery storage room slab on grade and the battery (concrete) pads, installation of roof gutters and water proofing materials were also completed
- Solar Power System: As of now the solar system progressed to 55.22 percent with the completion of concrete pedestals
- Upper and lower reservoirs: The upper and lower reservoir rehabilitation works progressed to 81.31 percent during August 2017, but did not progress in September 2017 as all construction was suspended for over one and one-half months
- Water Distribution Line: 98 percent of the Water Distribution Line has been completed with
 the installation of two-inch flexible pipes to connect the standard kiosks; three-inch and
 four-inch lines connecting the upper reservoir to the lower reservoir; pressure testing for all
 sections of the water line and backfilling. Pipeline disinfection and rinsing are the only
 outstanding activities for the water line. UIP suspended construction work in Robertsport
 on August 11, 2017 with the intention to resume work by mid-September

Issues and Remedies

- UIP submitted their electro-mechanical installation schedule but failed to provide the sand and gravel installation method statements for not only Robertsport but also Sanniquellie, and Voinjama. UIP promised to provide method statements by end of October
- There were no quality issues or deviations observed in Robertsport duringSeptember as work was suspended in August and September. However, some issues or deviations observed from previous months are yet to be addressed and therefore reported as punch list items
- QAC observed that the major quality or deviation issues were previously reported but still not taken care of. Those include:
 - High Density Kiosks: Rusting of column foundation bolts. All anchor bolts should be epoxy-coated, and Contractor has been advised to comply
 - Ductile Iron pipe misalignment along the concrete column supports in the three cities. QAC recommended that USAID instruct the Contractor to align correctly the DI pipe along the concrete column supports
 - The area of the solar panels field at Robertsport WTP due to the length chain-link fence is short by about 18 feet, total surface was reduced from 149 feet by 79 feet, as required by the drawing to 131 feet by 79 feet. The impact of this reduction is that there is insufficient gap between the outer panels and the fence for maintenance access, as well as increased likelihood of shading of panels during parts of the day, thus reducing their effectiveness





SCHEDULE ANALYSIS

The conclusion of the schedule analysis conducted by the QAC for the month of September, has revealed that as of the invoice cutoff date, September 30, 2017, the CIP Contractor, is on schedule. The solar delivery and installation schedule provided to the QAC in July indicated that the solar equipment would arrive two months early when compared to the revised schedule. However, the materials did not arrive by the end of September as planned and a new forecast date in the revised solar schedule is mid-November. This six-week delay in the September solar schedule has been addressed by loading resources and doing work at two sites in parallel. If UIP is able to execute this schedule as planned, then the installation activities are planned to commence before the scheduled start date and finish installation two weeks before the scheduled finish date.

The September electromechanical schedule provided by UIP indicates a finish date before the revised schedule completion date. However, there is a two-month delay in the scheduled start date of WTP pump installation (scheduled start date of August 8, 2017) for all sites due to lack of materials as well as the Subcontractor not mobilizing to site. As well as a delay in the completion of the ROB chemical dosing system, sedimentation basin baffle walls & tube settlers, SNQ intake pump installation, VNJ intake pump and ROB WTP pump installation. It should be noted that the success of UIP in implementing this electromechanical schedule requires them to have to be working at all three sites simultaneously.



The table below shows the percentage of planned activities which were actually executed in July through September.

Table 4. Summary of Planned Progress for All Sites

Months of July, Aug, & Sept	Robertsport	Sanniquellie	Voinjama	Total
4WLA - % of Activities Actually Completed	58.3%	38.8%	13.0%	26.2%
Revised Schedule - % of Activities Actually Completed	0%	0%	16.7%	2.8%
Both (4WLA & Schedule) - % of Activities Actually Completed	0%	0%	0%	0%

The 4WLA contained 0% of the scheduled activities to be performed in September which is a decrease from 30.9% in May, 43.8% in June, 23.1% in July, and 6.5% in August. Of all the scheduled activities to be completed, only one of the scheduled activities in September was actually completed which is a decrease from 15.2% in May and 9.7% in June but an increase from 0% in July and August. For the 4WLA activities, 10.5% were actually completed this month which is a decrease from 27.5% in May, 30.9% in June, and 15.7% in July, and 52.3% in August. However, all of the completed 4WLA activities were scheduled to be completed during previous months. These results demonstrate the lack of ability to properly plan and execute activities per the schedule.

The impacts to schedule this quarter were primarily related to the delay in delivery of materials to site (solar and electromechanical equipment) as well as the subcontractors not mobilizing as planned. The amount of work completed was well below the projected quantity of work to be performed and the impact of this is that the majority of activities (91.7%) are carrying over into October. The number of carryover activities are not significantly reducing with 160 activities in May, 270 activities in June, 250 in July, and 182 in August. In summary, the large amount of activities carrying over into October demonstrates UIP's lack of capacity to execute activities per the schedule.

HEALTH, SAFETY & ENVIRONMENT COMPLIANCE

LMWP II Environmental and Social Impact Assessment (ESIA) has been approved by all local government agencies and USAID (including the Mission, Regional Office and Washington). The Liberia Environmental Protection Agency (EPA) permits for the construction phase in the three cities were approved through March 2016 and renewed on November 1, 2016.

LMWP II activities included monitoring of the ESIA permit requirements and reporting accomplishment and compliance issues to USAID. Activities included:

- Environmental Monitoring of Construction Activities and Monthly reporting
- Quarterly Water Quality Analysis in three cities. Although this is an LWSC responsibility, oversight and coordination with LWSC has been included to encourage LWSC to meet their responsibilities
- Semi-Annual Monitoring Reports to EPA
- Quarterly Monitoring Reports to USAID

LMWP II has monitored compliance of the Contractor's HSE plan and some of the issues inspected included the following:

- Solid Waste Generation and Disposal: Construction debris were removed and disposed of at the dumping site provided and run by EPA personnel in all three sites
- Biological Environment: No major concern was noted during this quarter although frequency
 of rainfall has increased: water from the construction sites was drained to downstream of
 the raw water intake to avoid risks of pollution, damaged sections of the silt barriers in
 Voinjama and Sanniquellie were changed, and grass was to be planted in areas where
 vegetation has been destroyed
- Traffic Control: Caution tapes were reinstalled at project sites and kept safe
- Health and Safety: Throughout the reporting period, safe construction and clean site
 practices were enforced. Body temperature measurements continue to be taken at the
 construction site entrances to detect any possible illness from visitors and/or workers
- QAC had strong oversight on safety requirements: use of harnesses, hard helmet and gloves as well as cleanliness and hygiene at the workplace
- Socio-economic: Contractor continued to hire local skilled and unskilled labor including women
- Noise levels: QAC continued to monitor decibel levels of construction equipment, typically
 concrete mixers, generators and excavation machinery. QAC advised UIP for appropriate
 use of ear plugs for workers

• Air quality: QAC also continued to monitor exhaust from construction equipment (concrete mixers, generators and excavation machinery) and provided appropriate advice

2.1.3 TASK 3: TRANSITIONAL MANAGEMENT OF WATER-SUPPLY IMPROVEMENTS

LMWP II supports LWSC in the management of water system improvements and provides technical assistance and capacity building during the transition to O&M leading to cost recovery at the outstations. For this past quarter, activities have focused on the implementation of the Sustainability Monitoring Plan; assistance to operate and manage the water systems; the implementation of the water quality monitoring plan; the development of the local business plans; the implementation of the Operator Audit Exercise; and the preparation and submission of the Quarterly Performance Contract Report, as detailed in the sections below.

SUSTAINABILITY MONITORING

The Monitoring and Evaluation effort was conducted this year in conjunction with the Sustainability Monitoring Plan adopted under LMWP I. This outlines the framework used to monitor progress and performance towards achieving operational and financial sustainability for individual outstations in the interim until the completion of the Capital Investment Project (CIP).

A summary of the performance indicators in the three cities for Year I – from October 2016 to September 2017 and Q\$ (July 2017 to September 2017) are shown in Table 3 below.

Table 5. Outstations Operational Summary during Year 1 - Oct 2016 to Sep 2017

Indicator	Unit	Target	Actual	Variance	Comments
ROBERTSPORT					
Volume of Water Sold	Gallons	612 079	527 264	-10%	Actual is 10% lower than target, attributed to lower water demand for fishing activities and the high tariff of 20 LD before the adjustment.
Non-Revenue Water	%	4%	8%	-4%	4% higher than targeted NRW. This is attributed to the carelessness of the discontented caretakers, due to late salary payment
Revenue	USD	21 769	13 291	-39%	Revenue is lower than target by 39% due to the reduction of tariff in June 2017 from 20 LD to 5 LD, for which the increase in water sales has not offset the reduced sales income.
Collection efficiency	%	99%	99%	0%	Target achieved despite the under statements by the caretakers.
Total Expenses	USD	29 614	20 383	-31%	31% lower than target, due to reduction of personnel cost by LWSC.
Surplus/(Deficit)	USD	(7 846)	(7 092)	-10%	The actual deficit is 10% higher than target, due to lower sales performance.
Operating Ratio	%	74%	65%	-8%	8% lower than the target, due to a myriad of factors including lower than targeted sales and reduced tariff.
VOINJAMA					
Volume of Water Sold	Gallons	(7 846)	-7 092	-63%	Actual is 63% lower than target. No past performance was available during the

Indicator	Unit	Target	Actual	Variance	Comments
					development of the business plan targets. This performance will serve as baseline for next year's target.
Non-Revenue Water	%	4%	3%	1%	Performance is slightly better than target by 1%.
Revenue	USD	8 308	2 474	-70%	Actual is 70% lower than target. No past performance was available during the development of targets. This performance will serve as baseline for next year's target.
Collection efficiency	%	99%	100%	+1%	Slightly higher than target. Good performance could be attributed to the cash and carry system.
Total Expenses	USD	19 202	7 265	-62%	62% lower than target. Some positions including security guards, administrative assistant are vacant and the control of maintenance costs by LWSC.
Surplus/(Deficit)	USD	(10 894)	-4 791	-56%	Deficit is lower than target by 56% in correlation with the lower expenses.
Operating Ratio	%	43%	34%	-9%	9% lower than the target. This is attributed to low sales, high demand during the dry season and outreach activities carried out by the LSCs.
SANNIQUELLIE					
Volume of Water Sold	Gallons	231 863	176 965	-24%	Actual is 24% lower than target. This under performance could be attributed to the early rainfall in Sanniquellie and recurrent absence of the OIC from site.
Non-Revenue Water	%	4%	8%	-4%	4% underperformance is attributed to shortage recorded by the caretakers.
Revenue	USD	2 376	I 576	-34%	Actual is 34% lower than target. No past performance was available during the setting of targets. This performance will serve as baseline for next year's target.
Collection efficiency	%	99%	99%	0%	Target met, attributed to cash and carry and effective monitoring.
Total Expenses	USD	15 549	6 561	-58%	58% lower than plan. Some positions including security guards, administrative assistant are vacant.
Surplus/(Deficit)	USD	(13 172)	-4 986	-62%	Deficit is lower than target by 62% in correlation with the lower expenses.
Operating Ratio	%	15%	24%	9%	9% better than the target. This is attributed to lower expenses.

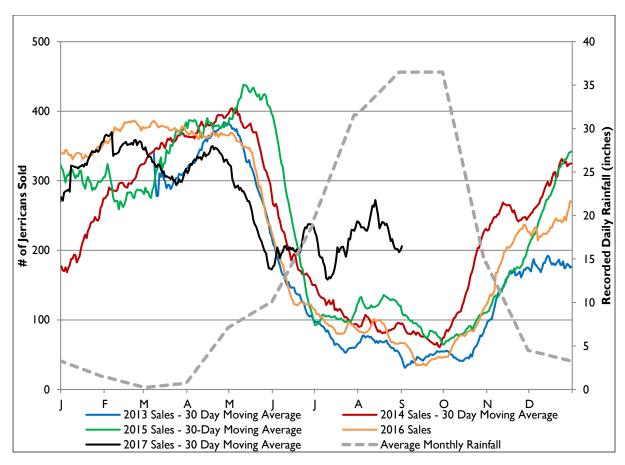


Figure 1: Daily Jerricans Sold from Robertsport: 30-Day Moving Averages

LOCAL BUSINESS PLAN - IMPLEMENTATION

During Y1 Q3, LMWP II supported the respective outstation teams to develop and update their local business plans for the next fiscal year, which covers July 2017 to June 2018.

The revised business plans included the targets for the critical performance indicators which serving as a benchmark to monitor the performance of the outstations from July 2017 to June 2018. During the YI Q4, the revised performance targets of the revised business plans was the basis of the monitoring and evaluation exercise carried out for the three cities.

O&M MANUAL AND WATER QUALITY

Throughout Year I, LMWP II provided the technical assistance and support for the management, operation and maintenance of the outstations in the three cities. This included the implementation of the operation and maintenance manual developed under LMWP I, and the implementation of the water quality assurance plan for the Mini Systems in Voinjama and Sanniquellie, and the pipeline extension system in Robertsport.

The testing is currently limited to the most critical physical-chemical parameters to ensure that the water supplied is safe for consumption. The parameters include the chlorine residue and the total chlorine concentration. The water quality tests in Robertsport have continued throughout Year I with samples collected and tested daily at the water treatment plant and at the water kiosks. Similar activities started in Voinjama and Sanniquellie in November 2016 following the substantial completion of the Mini Systems and the commencement of water sales. The Voinjama and

Sanniquellie were equipped with new testing kits for total chlorine and residual chlorine with indepth hands-on training provided by LMWP staff.

BI-ANNUAL OPERATOR AUDIT REPORTS

LMWP II facilitated the audit exercise for the first six months of operations covering the period from October 2016 to March 2017. The operator Audit Report is intended to review and validate the monthly operator's reports and the data of the Monthly Sustainability Monitoring process. The audit exercise, which was carried out by the LWSC M&E department team, identified anomalies and issues in the management and operation of the outstation. The recommendations for improvements, as well as the timeframe for these improvements, were agreed upon by the outstation team and the LWSC/Head Office. Importantly, no serious issues that may cause risk to health and safety of the outstation staff or to the public were identified at this time.

The next audit report covering the period April 2017 to September 2017 will be carried out during Y2 Q1.

ASSET MANAGEMENT PLAN

During YI Q4, LMWP II in collaboration with LWSC carried out an inventory of the LWSC assets in the three cities. The asset inventory registers will be updated on a regular basis to reflect all the changes and include the new assets installed during the CIP. This asset inventory will also form part of the schedule of the Outstation Management Contract between the private operator and LWSC.

UPDATE SUSTAINABILITY MONITORING PLAN

During YI Q4, in preparation for the implementation of the OMC, the LMWP II worked with the LWSC to revise and harmonize the Sustainability Monitoring Plan with the requirements of the Outstation Management Contracts (OMCs).

PERFORMANCE CONTRACT BETWEEN LWSC AND THE MOFDP

During Year I, LMWP II supported the operationalization of the Performance Contract, facilitating LWSC and MoFDP to meet and discuss the performance of each party with regards to the Performance Contract.

LMWP II, through its support to the LWSC M&E Unit, facilitated the measurement of the Performance Contract indicators by developing the requisite quarterly reports to review the key performance indicators. The principal findings from the report are summarized in the table below.

Table 6: Annual Performance Analysis - Period Jul 2016 to Jun 2017

No.	INDICATORS	UNIT	ACTUAL	TARGET	ACHIEVMT
I	Water Production	Gal	1,935,700,000	2,118,500,000	-9%
2	Consumption	Gal	432,200,000	779,500,000	-45%
3	Water Sales (Billing)	USD	4,227,000	7,676,000	-45%
4	Revenue/Collections	USD	3,448,000	6,031,000	-43%
5	Collection Efficiency	%	82%	79%	3%
6	Expenses	USD	5,441,000	7,626,000	-29%
7	Operating Ratio	%	63%	79%	-16%
8	Non-Revenue Water	%	78%	63%	-14%
9	Active Water Connections	Each	6,952	10,000	-30%
10	Hours of Service	Hrs.	8.8	9.0	-2%

OUTSTATION MANAGEMENT CONTRACT (OMC)

Based on the adopted institutional framework, LMWP II supported LWSC to develop the template contract for the OMC. During YI Q4, the LMWP II held a series of meetings with the key stakeholders to discuss the procurement of the Outstation Management Contract. The template contract was jointly reviewed with the LWSC senior management and the Board of Directors.

These OMC procurement meeting culminated into the finalization of the draft OMC and subsequent submission to the LWSC Legal Team for legal advice. Comments on the legal implications are being incorporated in the OMC for the finalization of the OMC. The OMC will be finalized after a review by the key stakeholders, including the LSCs, the MFDP and USAID. Upon acceptance by the various parties, the OMC will be included in the tender package for the selection of the private operator, and the OMC contract will be developed for each of the three project cities.

SUPPORT LWSC TO ESTABLISH A PRIVATE INDIVIDUAL CONNECTION AND FINANCING STRATEGY

The development of the Communication and Outreach Strategy document is a pre-requisite to the development of a policy and strategy for accommodation customers who are willing and able to install metered individual connections. The Communication and Outreach Strategy developed under LMWP I was updated and circulated within LWSC in Q2. At that time, a new Director for Sales & Marketing had been appointed in December 2016, and LWSC was focused on the completion of the African Development Bank funded projects in Buchanan, Kakota and Zwedru. Throughout Q2 to Q4, there has been no engagement by the LWSC Sales & Marketing Director on this subject, despite approaches by LMWP II COP to the LWSC BoD Chair for action and the assignment of additional management support to the Sales & Marketing team by the BoD. The focus of attention by the Sales & Marketing team has been to increase the customer base in Monrovia, which has been in decline during the last 12 months.

A key component of the Communications and Outreach Strategy is the household connection strategy, as this affects the messaging to each community to encourage connections and thus increase total sales value.

LMWP II will continue to try to engage the Director of Sales and Marketing in LWSC and to support him to gain a better grasp of critical decisions and inputs required from LWSC for progress regarding the development of the private individual connection and financing strategy. A scope of work for a Consultant to assist LWSC to develop such a strategy was prepared by LMWP II and submitted to the Managing Director of LWSC for review. The SOW was agreed by LWSC and the RFP was issued by LMWP II on 25 September 2017.

IMPLEMENTATION OF LSC WORK PLANS

LSC Activities/Community Engagement and Outreach

The LSCs have also been innovative thereby finding ways and means to facilitate, support and enhance their community outreach and sensitization/awareness effort pending the approval of the Work Plan and budget by USAID. The LSCs with the support of the LMWP II, however, continued with its community engagement/outreach and monitoring responsibilities, i.e., self-initiative efforts. The LSCs' activities/outreach, i.e. community engagements included the following: working with Robertsport Local County Health Team(CHT), and utilizing the CHT Health Talk Airtime for LSC Outreach purposes; working with the Robertsport City Mayors, and participation in Town Hall Meetings (governors, tribal chiefs women and youth groups) - sharing information on the Robertsport Tariff reduction from LD20.00 – LD5.00 and effective date of June 1, 2017; participation in County Steering Development Committee(CSDC) Meeting - project updates for County Authorities and development partners on pipeline extension and private connection; and household visits and outreach campaign at Robertsport Demonstration Schools program; Community Outreach (churches, market places, communities, car parking stations) on the CIP construction and its imminent risks and dangers; and safe water supply. Part of the Work Plans for the LSC activities include sensitization on tariffs and the need to pay for water services. Community engagement was mainly centered on land issue resolution and acquisition. The implementation was coordinated with LWSC.

Implementation of the LSC Approved Work plan

The LSCs' Work Plan was finalized in LMWP Y1Q3, and subsequently reviewed internally and submitted to USAID for approval. The Annual Work Plan (2017/2018) and budget was approved in July 2017 and implementation commenced in August 2017 intensifying the LSC Community Outreach and sensitization/awareness campaign and community engagement. The highlights of the Work Plans for the first three months include: I) Town Hall Meetings; 2) Public service announcement at the local radio stations in English and the various local languages; and 3) Community outreach and awareness exercises. The focus of discussion, promotions and/or talking points included: Safe water supply (and the importance of safe water); CIP construction and community health and safety (HSE); the CIP and Pipeline extension, and private house connection; and tariff and the Mini System or kiosks protection and maintenance. During the Town Hall meeting the LSC members encouraged the community to plan towards extending the pipeline to their individual properties where the pipeline was not passing close to them, as well as the need to pay for individual connections. Implementation is being coordinated with LWSC.

LWSC/LOCAL STEERIG COMMITTEE CHARTER – EXTENSION (EFFECTIVE JULY 3, 2017)

One of the key LMWP II tasks is to safeguard and sustain a number of LMWP I milestones under LMWP II, which includes Project City MOUs and the signing of the LWSC/LSC Charters in July 2015. The Charter, which was signed on July 7, 2015 and expired on July 3, 2017, provides for a review every two years. LMWP II worked with relevant stakeholders (LWSC and the project cities)

for the signature of an extension of the LWSC/LSC Charter for the next two years (effective July 3, 2017).

PRIVATE CONNECTION COST ESTIMATE - YARD TAP CONNECTION (MATERIALS)

During YI Q3, at the request from LWSC, LMWP II prepared cost estimates for private connections from the water main for a distance of 100 feet based on the rates used for CIP construction, for the three LMWP II project cities and submitted them to LWSC on May 2, 2017 for review and consideration. It is reasonable to infer that the cost of this individual private connection is "high" considering the socio-economic capacity of the low to medium income level of residents within the Liberian context therefore LWSC is exploring alternative approaches to encourage and enhance private connections. To date, no strategy has been developed by LWSC despite attempts by LMWP II to encourage a discussion within LWSC to identify lessons learnt from other Outstations and Monrovia that would enable viable solutions to be defined for the three cities.

ROBERTSPORT TARIFF ADJUSTMENT IMPLEMENTATION

During Y1 Q3, LMWP II supported LWSC in instituting the LWSC Board of Directors' decision for the Robertsport tariff reduction from LD20.00 to LD5.00 per jerry can. On May 23, 2017, a joint LWSC/ LMWP II/ LSC stakeholder meeting was held with the Robertsport City Mayor to inform the City about the LWSC management decision. During the quarter under review, the City Mayor Office held a town hall meeting with the governors, tribal chiefs, and youth and women leaders on the tariff adjustment in collaboration with the LSC. The LSC also carried out an outreach and awareness campaign that will inform the citizenry that the "adjusted tariff" will take effect on June 1, 2017.

2.1.4 TASK 4: CAPACITY BUILDING

LMWP II CAPACITY BUILDING PLAN

During Year I, LMWP II supported LWSC to develop a combined Capacity Building Plan in coordination with AfDB/UWSSP. On April 23, 2017, the LWSC Combined Capacity Building/Training Plan for 2017-2018 was finalized, incorporating the final comments/inputs from all stakeholders into the consolidated (USAID/LMWP II, AfDB/UWSSP, and LWSC) LWSC Capacity Building/Training Plan for 2017-2018. The final copy has been circulated for endorsement and approval by LWSC for implementation.

DEVELOP WATER OPERATORS PARTNERSHIP (WOP) / TWINNING RELATIONSHIP WITH REGIONAL UTILITY (E.G. NWSC) FOR TECHNICAL SUPPORT AND CAPACITY BUILDING

An MOU for a twinning arrangement between the LWSC and the NWSC was signed in September 2015 for a period of two years.

In Year I, LWSC failed to implement the provisions of the agreement which was therefore put on hold due to financial constraints faced by the institution. LWSC could not provide the funds required to carry out the activities spelled out in the MOU.

In Year I, The LMWP II explored the way forward for the facilitation of a collaboration and partnership between the LWSC and a regional utility. This included an assessment of the suitability of the NWSC or any other regional utility operator to provide technical assistance to the LWSC and create a conducive environment for the implementation of a water operator partnership program. The

recommendations for the twinning arrangement formed the basis for the Capacity Building Plan document.

For more details, refer to ANNEX D: Report for LWSC on service quality improvement resulting from the twinning with regional Water Operators (NWSC etc.)

TOOL TO MEASURE EFFECTIVENESS OF THE CAPACITY BUILDING EFFORT

During Year I, LMWP II refined the Water Utility Capacity Building Tool (WUCBT) developed under LMWP, aligning with the draft OMC and the Performance Contract with the intent to guide, measure, and track progress toward capacity goals through a simple quantitative scoring system. However, the OMCs have not yet been finalized, therefore the tool will require adjustment to ensure its sufficiently captures performance measures included in the final OMCs. It will be finalized and incorporated into the LMWP II Monitoring and Evaluation Plan (MELP) prior to the CIP coming online.

COMMUNICATIONS (BEHAVIORAL CHANGE OUTREACH) & SOCIAL MARKETING (SALES AND MARKETING) STRATEGY (BCO&SM); AND PLAN

Assist in the Implementation of Communications and Outreach; and Sales and Marketing Strategy – Training and Plans of Actions

The final draft of the Communication and Outreach & Social Marketing Strategy (BCO&SM), i.e., Sales and Marketing was circulated for final review and feedback in YI Q2; implementation is pending approval.

COMMUNICATIONS/ OUTREACH (BEHAVIORAL CHANGE) & SOCIAL MARKETING (SALE AND MARKETING) STRATEGY (BCO&SM); AND PLAN

During Year I, LMWP II supported the development of a draft Communication and Outreach Strategy for the project cities and circulated for review and feedback. However, no significant progress has been made during the year due to a lack of engagement by LWSC senior management. No further action on this aspect can take place until the LWSC senior management identifies the risks and associated mitigation measures that will impact the Outreach and Sales Strategy.

To enable the above activities to proceed according to plan, with a reduced delivery timeframe, the LMWP II requires additional resources with support being provided through local subcontractors to perform some activities.

The LMWP II supported the LWSC to issue an RFP for the selection of a local subcontractor. The main objective of the assignment is to provide technical assistance through LMWP II to LWSC to devise and execute a communication and outreach plan that will be implemented in each of the project cities of Robertsport, Voinjama and Sanniquellie.

2.1.5 OUTREACH, PROJECT CITIES MEETINGS

The USAID Deputy Mission Director, Mr Mervyn Farroe, visited Voinjama on August 17, 2017 to view progress of work at the CIP site, as well as to meet the Superintendent of Lofa County, where he made an announcement of additional funding for road repairs between Voinjama and the border crossing to support transportation and the economic situation.

Below is the summary of the major visits to CIP project sites carried out during Q1, Q2 and Q3.

UNITED STATES AMBASSADOR VISIT - VOINJAMA

On Friday, February 24, 2017, the US Ambassador to Liberia paid a courtesy visit to the Voinjama CIP sites. During the visit, the Ambassador was taken on a guided tour of the project facilities including the works at the Water Treatment Plant that is under construction, and the Water Mini System that is in operation. The tour was facilitated by the LWSC Site Engineer, Moses Tandanpolie. The tour provided the Ambassador with the opportunity to hold discussions with the Voinjama Local Steering Committee, and witness the operations of the Mini System including customer services.

PRESIDENT OF THE REPUBLIC OF LIBERIA VISIT - VOINJAMA

On May 3, 2017, the President of the Republic of Liberia, Ellen Johnson Sirleaf, paid a courtesy visit to the Voinjama CIP project sites. During the visit, the President was taken on a guided tour of the project facilities, including the works at the Water Treatment Plant that is under construction. The tour was facilitated by the LWSC Site Engineer, Moses Tandanpolie. The tour provided the President with the opportunity to hold discussions with the Voinjama Local Steering Committee, and witness the construction activities of the water plant, including the labor provided for the county citizens.



The President of the Republic of Liberia at the Water Plant Site, May 3, 2017, Voinjama

Other participants included the LWSC Managing Director N. Hunbu Tulay; Voinjama City Mayor; the County Superintendent; the Chair of the Local Steering Committee; and LMWP II Voinjama Resident Engineer Roberto Acedilla.

USAID MISSION DIRECTOR VISIT - ROBERTSPORT

On June 9, 2017, the USAID/ Liberia Mission Director, Dr. Anthony Chan, visited Robertsport to inspect the construction of water improvements being undertaken under the CIP contract. The primary focus of this visit was to engage with the local government, citizens and partners, including the LWSC, to discuss the financial sustainability of the water infrastructure improvements. This included types of operational and management mechanisms that are being instituted by the local government and partners to ensure sustainability of these water improvements, come the end of the construction period in April 2018.



The USAID Mission Director inspecting the CIP Works, June 9, 2017, Robertsport

Dr. Chan, joined by the LWSC Managing Director N. Hunbu Tulay, were taken on a guided tour by UIP and LMWP II on the Robertsport Water Improvement Works, including the "Quick Impact"

water kiosk (water sale point) in Fanti Town. Dr. Chan interacted with the community members and the kiosk operators to understand their thoughts about the project.

Mr. Tulay acknowledged the U.S. Government's enormous support through the USAID/ Liberia Mission, and reaffirmed the GoL's and LWSC's support for the Project. On the account of ensuring sustainability, Mr. Tulay indicated that there is the ardent need for extension of the transmission/distribution to strategic locations in the City, and LWSC is working with LMWP II to complete a study on the economic impact of such investments relative to cost recovery.

Participants in the local stakeholder meeting with Dr. Chan (local government, LWSC and community) included the Acting Superintendent, Honorable Pinny, and the City Mayor.

2.1.6 STAKEHOLDERS CONSULTATION MEETINGS IN YIQ4

LMWP II YI Q4 was characterized by a series of strategic program planning meetings linked to the Outstation Management Contract (OMC) procurement, as well as the regular project coordination with LWSC and AfDB/UWSSP PMT. These meetings included regular meetings between USAID/LMWP II and LWSC for information sharing and addressing regular program and operational issues surrounding the management and operation of the outstations. Highlights of the stakeholder meetings included the following: strategic meetings on the EOI/OMC and Way-forward; sales and marketing, and way-forward; the OMC procurement review; EOI Evaluation; and the SOW for the finalization of the BCO&SM Strategy and Plan. Project updates included the following: engineering and construction (CIP construction and challenges); outstations operations and challenges (Robertsport, Voinjama and Sanniquellie operations); joint LWSC/LSC/LMWP sustainability monitoring for Robertsport, Voinjama and Sanniquellie; LSC communication and outreach; lodging accommodation and transportation support for LWSC seconded engineer during electro-mechanical equipment installation for the CIP; security for water facilities after the construction; and issue of security acting as kiosks operators (Robertsport)

LSC/LWSC/LMWP II QUARTERLY COORDINATION MEETING

The LSC/LWSC/LMWP quarterly stakeholder meetings were held in the respective project cities of Robertsport, Voinjama and Sanniquellie. Highlights of the discussions include the following: The improvement of LSC/LWSC collaboration during the CIP construction; the LSC/LWSC ongoing communication and outreach campaign before the approval of the annual Work Plans; other community engagements; and review of the approval annual Work Plan for implementation. During the meetings, it was indicated that the LSC/LWSC collaboration in Voinjama has improved and rated very good; Sanniquellie has declined from good to "fairly good"; while Robertsport continues to improve with respect to the LWSC/LSC/Community working relationship and the LSC interrelational/interactive relationship. The holding of monthly LSC/LWSC local coordination meetings has declined: only one meeting has been held in each of the cities; but this was buttressed with a series of one-on-one meetings between the stakeholders. The LSC participates in the UIP/LMWP II weekly.

WATER UTILITY PRIVATE OPERATOR - EOI "OPEN HOUSE" SESSION

LMWP II worked along with the LWSC Sales and Marketing Department, the Liberia Water Producers Association (LWPA), and the Association of Liberia Construction Contractors (ALCC) to identify potential firms, companies and business enterprises that could have interest in the water utility private operator business. The session was intended to gauge local contractors' and businesses' interest in expanding their business into the private water utility operator sector. Expression of interests (EOIs) were issued, and during this quarter a total of eight business entities (firms, companies and business enterprises) responded expressing their interest.

During LMWP II Y1Q4, and on August 9, 2017, the LMWP II supported and facilitated the EOI Evaluation committee meeting. The meeting reviewed the TOR and the SOP for the evaluation committed to enhance the EOI evaluation process. The LWSC on August 10, 2017 endorsed the EOI Evaluation "Committee; and EOI evaluation was subsequently conducted in the same instance.

Concurrently, the LMWP II in collaboration with the LWSC reviewed the Outstation Management Contract (OMC) procurement. After a series of strategic review meetings, the final OMC Procurement meeting was held August 31, 2017 to finalize the draft OMC. The LWSC legal team/counsel has reviewed the final draft OMC and provided its legal advice. Their comments are being incorporated.

Those participating in these meetings included the following: LWSC (Managing Directors and Principle Deputies – Technical, Finance and Administration, Sales and Marketing Manager, Procurement Manager, and the Outstation Superintendent/LMWP II FOP

Table 7. Stakeholders Consultation Meetings during YIQ4

No.	Activity	Organization		Participant	:s
NO.	Stakeholder Consultation Meeting	Organization	Male	Female	Total
		Total	8	2	10
ı	Outstation Management Contract (OMC) - Ist Meeting	LMWP II	3	I	4
	recting	LWSC	5	I	6
		Total	8	I	9
2	Outstation Management Contract (OMC) - 2 st Meeting	LMWP II	3	0	3
	recting	LWSC	5	I	6
		Total	6	2	8
3	Outstation Management Contract (OMC) - 3 rd Meeting	LMWP II	3	0	3
	riceding	LWSC	3	2	5
		Total	8	4	12
4	EOI Evaluation Committee Meeting	LMWP II	2	0	2
		LWSC	4	4	8
	EOI Evaluation Meeting	Total	4	3	7
5		LMWP II	2	0	2
		LWSC	2	3	5
		Total	2	2	4
6	EOI-Evaluation- Follow up	LMWP II	1	0	Ţ
		LWSC	ı	2	
		Total	4	0	4
7	Coordination/Updates Meeting with LWSC	LMWP II	2	0	2
		LWSC	2	0	2
		Total	8	0	8
8	LWSC LMWP II Coordination Meeting #1	LMWP II	4	0	4
		LWSC	4	0	4
		Total	7	I	8
9	LWSC LMWP II Coordination Meeting #2	LMWP II	3	I	4
		LWSC	4	0	4
10		Total	7	4	11

No.	Activity	Organization	ı	Participant	ticipants	
INO.	Stakeholder Consultation Meeting	Organization	Male	Female	Total	
	1) N/CC // CC C	LMWP II	3	I	4	
	LWSC /LSC Quarterly Review Meeting Robertsport	LWSC	3	0	3	
	Troper aport	RLSC	Ţ	3	4	
		Total	9	2	11	
11	LWSC /LSC Quarterly Review Meeting,	LMWP II	2	0	2	
11	Sanniquellie	LWSC	3	0	3	
		SLSC	4	2	7	
		Total	8	2	10	
12	LWSC /LSC Quarterly Review Meeting,	LMWP II	I	0	I	
12	Voinjama	LWSC	3	0	3	
		VLSC	4	2	6	
		Total	52	13	65	
		LMWP II	3	0	3	
13	LSC/LWSC Town Hall Meeting Voinjama - Awareness	LSC	4	0	4	
		Other	44	13	57	
		VLSC	1	0	ı	
	LSC/LWSC Town Hall Meeting Awareness - Robertsport	Total	45	16	61	
		LMWP II	1	ı	2	
14		LWSC	3	0	3	
		Other	38	12	50	
		RLSC	3	3	6	
		Total	26	51	77	
15	Community Outreach Awareness	RLSC	6	6	12	
		VLSC&Other	20	45	65	
		Total	9	3	12	
	Joint Monitoring - Evaluation And Feedback	LMWP II	3	1	4	
16	Meeting - Robertsport	LSC		2	3	
		LWSC	5	0	5	
		Total	9	2	11	
	Joint Monitoring - Evaluation And Feedback	LMWP II	2	0	2	
17	Meeting - Sanniquellie	LWSC	3	0	3	
		SLSC	4	2	6	
		Total	6	2	8	
	Joint Monitoring - Evaluation And Feedback	LMWP II	ı	0		
18	Meeting - Voinjama	LWSC	3	0	3	
		VLSC	2	2	4	
19	Grand Total		226	110	336	

2.1.7 TASK 5: Coordination with Other Donor and Partner Programs during YIQ4

LMWP II/LWSC PROJECT COORDINATION AND OTHER MEETINGS WITH LWSC

In Y1Q4, several meetings were planned and held, including regular coordination meetings. These meetings were held between LMWP II and LWSC in addition to other special meetings that were arranged with LWSC as needed. The highlights of these meetings included: The Expression of Interest (EOI); the Outstation Management Contract (OMC) and Way-forward; Sales and Marketing and Way-forward; the LWSC Site Engineers (Robertsport, Voinjama and Sanniquellie); the EOI Evaluation; the SOW for the Social Marketing Strategy; the CIP construction and challenges; the Outstations operations management (ROB. SQN. and VJN); the Quarterly M&E Exercises – August Quarterly M&E Exercises Feedback; the LSC Community Outreach and Awareness; Lodging accommodation and transportation for LWSC seconded engineer during electro-mechanical equipment installation for the CIP; Security for Water Facilities after construction; and the issue of security acting as Kiosks operators (Robert sport).



2.1.8 TASK 6: PLANNING AND REPORTING IN YIQ4

In addition to routine reporting required under the contract Section F.5, additional reporting submitted to USAID this Q4 has included:

- Schedule Analysis Report for July 2017
- Schedule Analysis Report for August 2017
- Schedule Analysis Report for September 2017

2.1.9 PROJECT STAFFING, MANAGEMENT, AND ADMINISTRATION

LMWP STAFF CHANGES

During this Q4, the following staff movements have occurred:

- New IT Manager was recruited following resignation of the Monrovia IT Specialist
- Roberstport's staff engineer was reassigned in Monrovia from July 21 to support the CIP construction Section, for an initial assignment of 2 months. At the time of submission of this report, the assignment was extended to provide continued training by the STTA Deputy Project Manager in aspects of data collection, collation, analysis and reporting to assist the Lead Engineer with progress monitoring for all three cities.
- Driver Monrovia terminated
- New Driver recruited in Monrovia

3 CHALLENGES AND OPPORTUNITIES

3.1 CHALLENGES



For Year 2, it is proposed for monthly tri-lateral meeting to be held, USAID – LWSC – LMWP II, with the LWSC Managing Director, to check on progress and impediments in delivery of the Road Map components leading up to commencement of operations by the selected OMC contractor in April 2018.

The table below show that during the year, a total of 51 attempts for to hold meetings with LWSC have failed because either the meetings were cancelled, or they were postponed. 34 meetings were effectively held as planned with LWSC's prior consent. As a result, three citations of meeting out of five meetings were cancelled or postponed under a short notice.

Table 8: Analysis of meetings held vs meeting cancelled during Year I

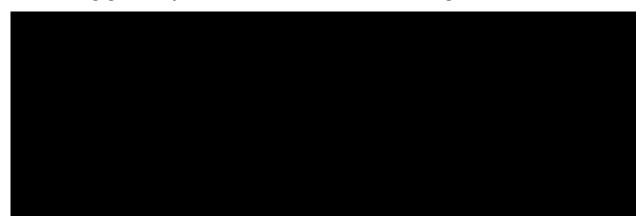
No.	Stakeholder	Quarter	Meetings Held	Planned and Cancelled
	LSC/Outreach and M&E	QI	I	0
		Q2	8	0
I		Q3	9	0
		Q4	0	0
		Sub Total	18	0
	LWSC	QI	3	0
		Q2	8	9
2		Q3	13	25
		Q4	10	16
		Sub Total	34	51

Secondly, the misplacement of project and program documents coupled with continuous request for resubmission for review has significantly contributed to the procrastination of program effort delivery schedule. Consequently, the issue of re-inventing the wheel on strategic program matters is becoming evident. The draft REOI was discussed and submitted for review on March 6, 2017, with the approval of the two-page document being received on April 11, 2017. During the June 1, 2017 meeting, LWSC re-requested the REOI for review for the second time while LMWP was preparing for the open house scheduled for June 5, 2017. LWSC did not provide approval and the open house discussion was postponed to June 20, 2017. Furthermore, finalizing the LWSC Capacity Building Plan 2017-2018, has proven difficult due to the postponement of scheduled meeting times and slow responses to distributed documents for comment/updating.

Since direct engagement of the Chair of the BoD on May 9, 2017, as well as the Chairs of the Finance and Governance Committees of the BoD at a meeting held at LWSC on June 7, 2017, there

has been improved engagement at the LWSC Managing Director and Deputy Managing Director levels. With the President of Liberia issuing a directive and targets to be reached prior to presidential elections in October 2017, combined with coordination of implementation of other donor funded activities where staff receive salary supplements and other "financial incentives" to support that donor's project, LWSC senior management remains distracted.

Lack of Engagement by LWSC Director of Sales and Marketing



Persistent Absence of the LWSC Site Engineers from the Project Sites

Even though the working relationship and collaboration amongst the LWSC Site Engineers, the LSCs and the LMWP II is cordial, the frequent absence of the LWSC OICs/Site Engineers from the project sites presents challenges to the following: resolving the issues encountered during the operations of the Mini Systems and kiosks, as well as during the CIP construction; joint LWSC/LSC community engagement to address community related issues such as the sidewalk demarcation and clearing issues; and LMWP II RE capacity building/training and mentoring for the Site Engineers, which is crucial for the completion of the CIP construction activities, such as the piping works for the WTP and the installation of the electromechanical equipment. From the on-set, the Site Engineers were frequently absent from the sites; but during LMWP II Y1Q4, the LWSC Site Engineers for Sanniquellie and Voinjama were "recalled" from the project sites by LWSC/Technical Services to take up "temporary" assignment at the LWSC HO. They have not returned to-date to their assignment in the project cities.

As a result, the following impacts on operations and community engagement are noted during this quarter:

- LWSC insensitivity to addressing issues affecting the operation of the water system. LWSC
 delays in resolving issues identified during the monthly M&E meetings (for example, kiosk
 operators' salary payment delay resulting in the kiosks operators' reluctance to deposit
 revenue as is their responsibility)
- Community is not fully aware of the presence of the LWSC in Robertsport
- Lack of LWSC/LSC collaboration and coordination in resolving community concerns and issues
- Regular LSC and LWSC meetings are a challenge, due to the absence of the OIC

Contractor Procurement of Materials

During this reporting period, contractor procurement and delivery system has improved allowing them to reduce the delays on the construction work by two weeks. The timely delivery of all the pumps to the sites and the early delivery of the solar systems equipment, as per the revised solar installation plan, will allow further reduction of the observed delays.

However due to the heavy rains during this reporting period, the Contractor suspended pipeline installation work because they would not be complying with the technical specifications. The remaining work will be executed after the rainy season.

4 CONTRIBUTIONS OF SHORT-TERM TECHNICAL ASSISTANCE

Due to the lack of capability of Liberian engineers to perform the role of Office Engineer in Monrovia, a six-month assignment from the Home Office was approved to provide schedule analysis work based in Monrovia for a period of six months commencing in May 2017. In order to create a local expertise, one of the three engineers in Robertsport was brought in August to support the CIP construction Lead Engineer and be trained in Schedule Analysis including information collection.

Review of the construction works progress compared to the plan is a component of construction oversight. I include detailed analysis of the planned work using the approved schedule and Contractor's 4WLA when compared to the actual work performed, as well as a prediction of the CIP construction completion date. The output of this report is incorporated in the reporting under Task 2.

5 WORK PLAN FOR NEXT YEAR (YEAR 2)

The main activities outlined below and scheduled to be implemented during Year 2 are in accordance with the Work Plan submitted for USAID approval on August 28, 2017

A summary table of institutional strengthening activities planned for the next year is shown in Annex B.

5.1 MAIN ACTIVITIES FOR INSTITUTIONAL STRENGTHENING BY TASK

5.1.1 TASK I: INSTITUTIONAL FRAMEWORK AND BUSINESS MODEL

INSTITUTIONAL FRAMEWORK - IMPLEMENTATION

Continue to provide support to LWSC and relevant GOL counterparts on the best ways to implement the framework, development of a detailed plan and supporting of its implementation.

ROADMAP PLAN - IMPLEMENTATION

Continue the implementation of the Roadmap with focus on key critical elements like the selection of the private operator in time for the completion of the construction phase and the completion of the necessary trainings for both LWSC, the operators, and the LSC to operate and manage the facilities funded by USAID and constructed through the CIP.

BUSINESS PROCESS REVIEW: OPERATIONALIZATION (IMPLEMENTATION OVERSIGHT) TOOLS/MECHANISMS FOR COST RECOVERY

Continue to assist LWSC to adapt the Cost of Service Model to adjust key assumptions, revenue and cost projections. The key outcome of the Business Process Review will be the setting a tariff structure for each category of customer in the three cities.

SUPPORT LWSC TO ENSURE FINANCIAL COMMITMENTS OF GOL REGARDING SUBSIDY OF INITIAL OPERATIONS

Work with LWSC and the Ministry of Finance and Development Planning (MFDP), State Owned Enterprises (SOEs) unit to chart the way forward to gain GoL commitment to the subsidy scheme together with funding allocations in the GOL annual budget.

SUPPORT LWSC FOR CONTRACTING LOCAL FIRMS FOR PRIVATE WATER UTILITY OPERATOR

In accordance with the Roadmap timeframe, LMWP II will support LWSC in the selection of a private water utility operator for the outstations in the three cities. This includes the EOI, the development and finalization of the tender package, and the facilitation of the solicitation and selection of private water utility operators.

LWSC/LSC CHARTER IMPLEMENTATION

Continue the implementation of the Work Plan development for the LSCs in the three cities, and quarterly Work Plan review and planning workshop.

5.1.2 TASK 3: TRANSITIONAL MANAGEMENT OF WATER SUPPLY IMPROVEMENTS

SUSTAINABILITY MONITORING

Continue the monitoring & evaluation exercise for the three cities, conduct the quarterly joint feedback meetings and submit the monthly sustainability monitoring reports. This activity includes the following:

- Implementation of Sustainability Monitoring Plan and Framework in the Interim
- Sustainability Monitoring Plan and Framework Review
- Implementation of Sustainability Monitoring Plan and Framework under the OMC

OUTSTATION BUSINESS PLAN DEVELOPMENT

Continue to assist LWSC Head Office and outstation teams to implement the current business plans for Robertsport, Sanniquellie and Voinjama. The business plans serve as a reference to monitor the outstation performance towards achieving the targets set. Support the development of business plans for next LWSC fiscal year under the OMC.

BI-ANNUAL OPERATOR AUDIT REPORTS

LMWP II will facilitate the bi-annual Operator Audit Reports for the three project cities which is scheduled for each six-months.

LWSC INTERNAL PROCESS MECHANISM AND FINANCIAL PROCEDURES GUIDELINES

Facilitate the development of Procedures and Process for administrating and managing the OMC. This will also include the Financial Procedures Guidelines for the management of the Escrow account established for each outstation.

DIRECT TECHNICAL ASSISTANCE FOR OPERATION AND MAINTENANCE O&M

Implementation of the Operation and Maintenance Manuals in the interim

Technical assistance for the Operation and Maintenance the systems after completion of the CIP

WATER QUALITY ASSURANCE PLAN

Continue to facilitate LWSC to conduct basic daily water quality analysis until the CIP system is fully operational.

After the completion of the CIP when the outstation laboratories are fully equipped and functional, LMWP II will facilitate LWSC to carry out more in-depth analysis to ensure that water quality is consistent with the standards.

ASSET MANAGEMENT PLAN

Assist LWSC to update the Asset Inventory in the project cities and implement a pilot asset management system.

GOL/LWSC PERFORMANCE CONTRACT

Continue to work with the LWSC and the SOE Unit to implement the Performance Contract including the extension of the Performance Contract Extension and the regular Quarterly Performance Report.

OUTSTATION MANAGEMENT CONTRACT (OMC) & IMPLEMENTATION OF MOU BETWEEN USAID / GOL / LWSC

Provide oversight during the implementation of the OMC and facilitate the subsidy of initial operational expenses.

PRIVATE INDIVIDUAL CONNECTION AND FINANCING STRATEGY

Continue to support LWSC in developing and finalizing the policy and strategy for accommodating potential private (individual and commercial) customers.

LSCS WORK PLANS

Continue to provide support and facilitate the development and implementation of the LSC Quarterly Work Plans; and hold quarterly review meeting.

5.1.3 TASK 4: CAPACITY BUILDING

IMPLEMENTATION OF LMWP II CAPACITY BUILDING PLAN TARGETING THE LWSC, THE PRIVATE OPERATORS AND LSCS

In collaboration with LWSC, LMWP II will continue to support the implementation of the LMWP II/LWSC Capacity Building and Training plan.

DEVELOP WATER OPERATORS PARTNERSHIP (WOP) / TWINNING RELATIONSHIP WITH REGIONAL UTILITY (E.G. NWSC) FOR TECHNICAL SUPPORT AND CAPACITY BUILDING

Assist LWSC to develop a twinning relationship with regional water utilities.

OFF-SITE VISIT TO OPERATIONAL SLOW SAND FILTER IN SIERRA LEONE

Facilitate a study tour to visit an operating slow sand filter in Sierra Leone, so that LWSC engineers can gain a better understanding of the practical aspects relating to the maintenance of a slow sand filter.

TOOL TO MEASURE EFFECTIVENESS OF THE CAPACITY BUILDING EFFORT

Support the finalization of the tool and facilitate the implementation to measure the effectiveness of the capacity building activities.

COMMUNICATION AND OUTREACH (BCC) & SOCIAL MARKETING (BCO&SM) STRATEGY AND PLANS OF ACTION

LMWP II will work with and support the LWSC to finalize the draft (BCO&SM) Marketing Strategy, and Communication and Outreach Plan; and assist and facilitate the implementation of both plan and strategy.

SUPPORT LSCS IN DEVELOPING SAFE WATER USAGE, MARKETING AND OUTREACH CAMPAIGN

Work with LWSC facilitate the finalization and implementation of the "Community-based" CAO/BCC and Social Marketing campaigns plans of action through a local subcontractor.

5.1.4 TASK 2: ANTICIPATED CIP CONTRUCTION ACTIVITIES

Based on the revised construction schedule, the following activities are planned for the next quarter:

ROBERTSPORT

- Continue punch list items repair including the non-alignment of pipes and culvert crossing
- Continue pressure testing main water pipelines and fire hydrants
- Start disinfection and rinsing of main water lines
- Install inlet screen and slide gates at Intake Structure
- Install, test, and commission high lift pumps at WTP Building
- Install pipes and valves at slow sand filter
- Start installation of sand filter media and gravel for slow sand filter
- Install and test pumps at Lower Reservoir
- Install solar panels, batteries, cables, inverter and control systems at Battery Storage Building
- Test and commission the solar systems including on-job training for LWSC Engineer
- Install and test and commission standby generator at WTP
- Install, test, and commission of stream gauging station

SANNIQUELLIE

- Complete all water pipelines excavation works, laying of pipes, backfilling and installation of pipe fittings along Connection Street and Railway culvert crossing
- Enact compaction testing of water pipeline backfill
- Enact pressure testing, disinfecting and rinsing of the Water Pipeline Transmission & Distribution mains
- Intake submersible four pumps electrical and control works
- Complete drain piping/manholes/septic tank
- Complete installation of submersible pumps and controls for the river filter wells and connect pipes and fittings
- Complete solar field gravel pavement spreading and commence installation PV structural support for solar panels
- Construct river trench and sleeve for installation of stream gauging equipment
- Cascade aerator installation
- Supply and install Chemical Dosing System
- Sand filter pipes/grates/rail
- Complete 15 Standard Kiosks. Install EPDM fabric, down spouts for roof rain water drainage & final painting/repairs of wall structure exterior
- Complete three high density kiosk. Test and commission high kiosk system
- Test the CIP water system, commissioning and handover

VOINJAMA

- Continue main water lines trench excavation, pipe installation, and backfilling at various section of the pipe network
- Continue construction of thrust blocks and installation pipes for culvert crossing
- Continue installation of fire hydrants and bollards
- Continue pressure testing main water lines
- Start disinfection and rinsing of main water lines at gold, rubber, timber, and iron streets
- Continue installation of two-inch HDPE pipe connection from main water lines to public kiosks
- Repair handrails and install ladders at Intake Structure
- Install intake screen and electrical and control system at Intake Structure

- Install high lift pumps at WTP Building
- Install pipes and valves at slow sand filter
- Continue hauling sand filter media and gravel for slow sand filter
- Install pipes and valves at elevated water storage tank
- Install pipe connection from riverbank wells to WTP Building
- Test and commission riverbank wells
- Install solar panels, batteries, cables, and inverter, and control system at Battery Storage Building
- Install, test, and commission standby generator at WTP
- Install, test, and commission stream gauging station

6 PROCUREMENT PLAN UPDATE

During this reporting period, LMWP II did not procure any capital item in excess of \$5000 although the cost budget allowed procurement of two vehicles. However, for Year 2 the only probable item we can anticipate buying is vehicles if conditions require reinforcement of LMWP II motorpool.

7 PMP INDICATOR RESULTS

#	Indicator	FACTS/ Custom	Disag.	Freq.	Baseline	Target YI	Actual YI Q4	Remarks
Ι	Percent of population using basic or safely managed drinking water services which provides potable water as a result of USG assistance - Outcome Indicator (Note: custom indicator designed to show direct impact of LMWP-supported work, which provides potable water, in contrast to most existing "improved" "basic" sources which LMWP has shown to be contaminated, unable to produce water year-round, or > 30 minutes round trip travel time.)	Custom	Sex (Female, Male); Wealth Quintile, Site	Ann	R: 44% V: 0% S: 0% (Per LMWP I Custom Indicator #1.1 for FY16)	R: 50% S: 3% V: 12% T:13% (V&S per Outstation Business Plans FY16-17)	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.	
2	Percent of operating expenses covered by customer charges without external subsidies (Utility Operating Ratio) - Outcome Indicator	Custom	site	Ann	R: 67% S: N/A V: N/A (Per LMWP I Indicator #4 for FYI 6)	R: 63% S: 15% V: 47% T:47% (Per Outstation Business Plans FY16-17)	R: 65% S: 24% V: 34% Grand Total=51%	
3	Number of people gaining access to basic drinking water services as a result of USG assistance- Outcome Indicator (Note: Previous standard indicator for "improved" water was only based on respondent answers without verification of source protection, seasonality and travel time. Revised F indicator now includes verification, so fewer existing people will be classified as having access prior to LMWP-supported infrastructure, resulting in higher expected results for this indicator.)	HL.8.1-1	Sex (Female, Male); Wealth Quintile, Site	Ann	N/A	R: 0 S: TBD V: TBD T: TBD (Target to be set after baseline HH Survey in YI)	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.	

#	Indicator	FACTS/ Custom	Disag.	Freq.	Baseline	Target YI	Actual YI Q4	Remarks
4	Number of people gaining access to safely managed drinking water services as a result of USG assistance – Outcome Indicator (Note: Indicator definition refers to source being within 30 minutes of combined travel, waiting and container filing time, thus a distance of 500 m between the kiosk and household has been assumed).	HL.8.1-2	Sex (Female, Male); Wealth Quintile, Site	Ann	R: 1,823 S: 0 V: T: 1,823 (Per LMWP I Custom Indicator #7 for FY16)	R: 1,823 S: 678 V: 2;779 T: 5,280 (V&S Per Outstation Business Plans FY16-17 R Per LMWP I Custom Indicator #7 for FY16)	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.
5	Percent of population using basic or safely managed drinking water services - Impact Indicator	custom	Sex (Female, Male); Wealth Quintile, Site	Ann	R: 47% S: 43% V: 58% T: 51% (Per LMWP I Custom Indicator #1 for FY16)	R: 47% S: 46% V: 70% T: 58% (Per LMWP I Custom Indicator #I for FY16 and the LMWP II Indicator#4)	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.
6	Number of people receiving improved service quality from an existing basic drinking or safely managed water service as a result of USG assistance- Outcome (Note: Only will apply to Mini Systems in Sanniquellie and Voinjama given that the CIP is not improving existing sources but providing a brand new source.)	HL.8.1-3	Sex (Female, Male); Wealth Quintile, Site	Ann	0	R: TBD S: TBD V: TBD T: TBD (Target to be set after baseline HH Survey in YI)	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.	Significant performance are expected only after the completion of the CIP when the construction phase is complete. Detail survey shall be carried out during Year 2.
7	Number of people educated on tools, approaches, and/or methods for water security, integrated water resource management, and/or water source protection as a result of USG assistance- Output Indicator	HL.8.3-1	site, gender, trainee type	Q	0	R: 0 S: 0 V: 0 M: 4 T: 3 BoD + I LWSC for off site	Mon: M-2/F-2 Grand Total=4 EOI Training	Mon: M-4/F-3 Grand Total=7 Training type: Cost of Service EOI Training

#	Indicator	FACTS/ Custom	Disag.	Freq.	Baseline	Target YI	Actual YI Q4	Remarks
8	Local Operator Water Utility Capacity Building Score (based on Water Utility Capacity Building Tool) - Outcome Indicator	Custom	site	Ann	TBD	TBD	N/A	Implementation Start in Year 2
9	Number of action plans implemented for water security, integrated water resource management, and/or water source protection as a result of USG assistance- Outcome Indicator	HL.8.3-2	LWSC	Ann	0	3 (CIP Business Plans)	CIP Business Plan: 3 LSC Work Plans: 3 Grand Total=6	
10	Number of outreach activities conducted by LWSC to facilitate customer participation or inform stakeholders on new procedures or services – Output Indicator	Custom	site, gender	Q	0	R: 9 S: 9 V: 9 T: 27 3 Quarterly M&E visits, I HH survey, I media campaign, 4Nr bi-monthly LSC meeting	ROB: M&E visit-I Quarterly LSC meeting-I Town Hall Meeting-I Community Outreach-2 VNJ: M&E visit-I Quarterly LSC meeting-I Town Hall Meeting-I Community Outreach-3 SNQ: M&E visit-I Quarterly LSC meeting-I Grand Total=I3	ROB - 10: M&E visit-3 HH survey-I Quarterly LSC meeting-3 Town Hall Meeting-I Community Outreach-2 VNJ - 11: M&E visit-3 HH survey-I Quarterly LSC meeting-3 Town Hall Meeting-I Community Outreach-3 SNQ - 7: M&E visit-3 HH survey-I Quarterly LSC meeting-3 Grand Total=28

During Year 2, we are anticipating a revision of the Monitoring Evaluation and Learning Plan with the following objectives:

- I. To align the MELP to come in line with Mod 2
- 2. Reduce complexity and more clearly reflect the main project accomplishments per contract
- 3. Save money on HH surveys
- 4. Reflect available local M&E capacity

8 FINANCIAL STATUS REPORT



9 CONTRACT DELIVERABLES FOR YEAR I

Deliverable(s) per contract section F.5.1 (Contract Mod 002, August 2017)

NO.	DELIVERABLE	CONTRACT DUE DATE	DATE SUBMITTED / NOTES
Task	I: Institutional Framework for Wate	r Provision	
Τ	Final Institutional Framework agreed upon for outstation operations	4 months from effective date of contract	Submitted on Feb 15, 2017, approved on Mar 31, 2017.
2	Consultations with TWG, LWSC and other stakeholders to establish collaboration & support for ongoing CIP construction	5 months from effective date of contract	Submitted on Feb 28, 2017, Accepted on Mar 24, 2017
3	Phased implementation plan for LWSC outlining the steps and timeline for operationalizing the institutional framework in each city, synchronized with the timing of infrastructure completion (including Mini Systems) and with engagement of LWSC to implement the plan. (Mod #2).	10 months from effective date of contract. RFA 027 submitted on July 10, 2017 requested extension to September 30, 2017. COR concurrence provided on July 11, 2017.	Submitted on Sep 22, 2017, Awaiting Acceptance of the deliverable
Task	2: Capital Works		
ı	Detailed transition plan and timeline for assuming QAC responsibilities	21 days from effective date of contract	Submitted on Oct 21, 2016, approved on Mar 24, 2017.
2	Deployment of resident engineers on site and full takeover of the CIP QAC functions	Personnel deployed within 30 days from effective date of contract. Full takeover 45 days from award.	Resident Engineers already on site from LMWP I.
3	Field Construction Reports	Monthly, to be submitted within 10 days of each following month. (Mod #2)	Sep 2016: not required Oct 2016: submitted Nov 16, 2016 Nov 2016: submitted Dec 20, 2016 Dec 2016: submitted Jan 19, 2017 Jan 2017: submitted Feb 20, 2017 Feb 2017: submitted Mar 23, 2017 Mar 2017: submitted April 10, 2017 Apr 2017: submitted May 10, 2017 May 2017: submitted Jun 11, 2017 Jun 2017: submitted Jul 10, 2017 Jul 2017: submitted Jul 10, 2017 Jul 2017: submitted Aug 9, 2017 Aug 2017: submitted Sep 10, 2017

NO.	DELIVERABLE	CONTRACT DUE DATE	DATE SUBMITTED / NOTES
			Sep 2017: To be submit in Oct 2017
4	Substantial Completion reports	Starting from 24 months based on the substantial completion of the CIP respective cities, with the date amended as authorized by CIP CO. (Mod #2).	Year 2 Deliverable
5	Carry out Final Acceptance of CIP	12 months after substantial completion	Year 3 Deliverable
Task	3: Transitional Management of Wat		
ı	Final Outstation Management Business Plans, including transition plan for phase out of USAID support in each outstation by the end of the project, based on agreed upon model.	16 months from effective date of award.	Year 2 Deliverable
2	Provide oversight on the implementation status of the Performance Contract (PC) between LWSC and the MODFP and Outstation Management Contract (OMC) and submit an initial and annual status report.	Initial report 8 months from effective date of award, subsequent reports with Annual Report.	Submitted on Apr 28, 2017 and re-submit on Sep 27, 2017, awaiting acceptance of deliverable.
3	Update Sustainability Monitoring Plan (Financial and Operational)	Before end of Year I	Submitted on Sep 25, 2017. Approved on Sep 29, 2017.
4	Sustainability Monitoring Reports (includes M&E data and roll up from Feedback/Evaluation Meetings)	Monthly, starting 2 Months from effective date of award	Sep 2016: submitted Nov 8, 2016 Oct 2016: submitted Nov 29, 2016 Nov 2016: submitted Dec 27, 2016 Dec 2016: submitted Jan 19, 2017 Jan 2017: submitted Feb 20, 2017 Feb 2017: submitted Mar 29, 2017 Mar 2017: submitted Apr 27, 2017 Apr 2017: submitted Jun 28, 2017 Jun 2017: submitted Jun 28, 2017 Jun 2017: submitted Jul 28, 2017 Jul 2017: submitted Aug 29, 2017 Aug 2017: submitted Aug 29, 2017 Sep 2017: To be submit in Oct 2017

NO.	DELIVERABLE	CONTRACT DUE DATE	DATE SUBMITTED / NOTES
5	Operator Audit Reports Biannually	Biannually, starting 12 months from effective date of award	Oct 2016-Mar 2017: Submitted May 2, 2017 and approved May 17, 2017 Apr 2017- Sep 2017: To be submit in Oct 2017 Oct 2017-Mar 2018 Apr 2018- Sep 2018
6	Additional Transitional Management activities in Quarterly and Annual Reports		
Task 4	4: Capacity Building		
ı	Final revised LWSC Communications and Outreach Plan including marketing of water to the general public and sales of individual connections	Before end Year 2	Year 2 Deliverable
2	Capacity Building Plan for supporting LWSC to operationalize the agreed upon institutional model.	Before End Year I	Submitted on Sep 7, 2017, awaiting comments.
3	Final Utility Capacity Building Tool with baseline indicators to measure the capacity building efforts, as well as progress by LWSC in meeting set targets and report the status of the activity.	Before end Year I	Submitted on September 28, 2017. Awaiting acceptance of deliverable
4	Report for LWSC on service quality improvement resulting from the twinning with regional Water Operators (NWSC etc.)	Annually	Request for delivery change for Twinning Report - to be included in Annual Report. Due Date Oct 30, 2017
5	Additional capacity building activities reporting in Quarterly and Annual Reports		
Task :	5: Coordination with other partners		
ı	Combined LWSC capacity building plan capturing activities planned by LMWP II and other donors and partners supporting LWSC capacity building (AfDB UWSSP, WB etc.)	Before end of Year I	Submitted on Sep7, 2017, awaiting comments.
2	Coordination Meeting minutes	Quarterly (or as needed)	included in Quarterly Reports
3	Additional Coordination activities reporting in Quarterly and Annual Reports		
Task	6: Planning and Reporting		
1	Monitoring and Evaluation Plan	Draft version due with technical proposal, final 60 Calendar days from effective date of award	Submitted on November 29, 2016, revision submitted on Feb 8, 2017, approved on Feb 9, 2017.

NO.	DELIVERABLE	CONTRACT DUE DATE	DATE SUBMITTED / NOTES	
2	Mobilization of key personnel	30 Calendar days from effective date of award	Mobilized on Oct 16, 2016.	
3	Draft First Annual Work Plan, EMMP	60 Calendar days from effective date of award	Submitted on Nov 29, 2016; Comments received on Dec 28, 2016, revision I submitted on Jan 13, 2017; Comments 2 received on Jan 26, 2017, revision 2 submitted on Feb 8, 2017; accepted on Mar 24, 2017.	
4	Subsequent Draft Annual Work	Annually by September 1	Work Plan Year 2: Submitted on Aug 28, 2017. Awaiting Approval.	
	Plans & Procurement Plan	7 timedany by deptember 1	Work Plan Year 3:	
			Work Plan Year 4:	
5	Quarterly and Annual Progress Reports, with indicator reporting entered directly into Mission PIDS database by PIDS deadline.	Quarterly, 30 Calendar days after end of each quarter; Annually on 30 October	Y1Q1: Submitted on Jan 29, 2017, acknowledge receipt on Jan 21, 2017 Y1Q2: Submitted on Apr 27, 2017, Comments received on May 16, 2017, re-submitted on May 23, 2017; accepted on May 25, 2017. Y1Q3: Submitted on Jul 27, 2017, Comments received on Aug 18, 2017, re-submitted on Aug 28, 2017, awaiting approval. Y1Q4 and Year 1: To be submitted in Oct 2017	
6	Quarterly and Annual Financial Reports	I5 calendar days before the end of each fiscal quarter; the fourth quarter financial report will serve as the annual report	Q1: Submitted on Dec 16, 2017. Q2: Submitted on Mar 15, 2017. Q3: Submitted on Q4: Submitted on	

ANNEX A: SUMMARY OF INSTITUTIONAL STRENGTHENING ACTIVITIES ACHIEVED DURING THIS YEAR I

The Table below provides a summary of the progress of each activity outlined in the Work Plan for Year I, relating to tasks I, 3 and 4 only:

ACTIVITY	SCHEDULE
Task I: Assist LWSC to Finalize and Implement Model for Sustainable Management of Water F	
I.I Institutional Framework Review	
I.I.IEngage NWSC STTA support to framework review (SOW, USAID travel approval)	Cancelled for due to logistical constraints
I.I.2 Work with NWSC to provide in-country Short-Term Technical Assistance (STTA) - Facilitation of Review	Cancelled for due to logistical constraints
I.I.3 Retreat Workshop and Presentation of Finalized framework to LWSC BOD for adoption and signature	Complete in Jan 30, 2017.
1.1.4 Submission of Final Agreed Institutional	Final report submitted to USAID. LWSC's
Framework to USAID	reaffirmation letter was submitted in Mar 30, 2017.
1.2 Prepare Roadmap plan and timeline for reaching c	ost recovery by the end of the Task Order
I.2.1 Work with LWSC management and	Complete. Finalized for signature on Sep 1, 2017
relevant and GOL to develop a roadmap/clear	
plan for reaching cost recovery	
1.2.2 Presentation of the final Roadmap for cost	Complete. Approved by LWSC on Sept 20, 2017
recovery to LWSC BOD and senior	
management for adoption	
1.3 Business Process Review: Operationalization (Imp	lementation Oversight) Tools for Cost Recovery (CR)
1.3.1 Financial and business model Analysis	Complete. Meeting with BoD on Jun 7, 2017. For Validation and Feedbacks
1.3.2 Cost of Service Model outlining key	Complete. Meeting with BoD on Jun 7, 2017. For
assumptions, revenue and cost projections	Validation and Feedbacks
I.3.3 Tariff Analysis; and Performance Indicator	Complete. Meeting with BoD on Jun 7, 2017. For
for Cost Recovery, Business Plans, capacity	Validation and Feedbacks
building, Communication and Outreach	
1.4 Support LWSC to secure GOL financial	Completed through the Outstation Business Plan
commitments regarding subsidy of initial operations	Review Process in June 2017
are allocated	
1.5 Support LWSC for contracting local firms for Priv	
	Complete. EOI issued on Apr 17, 2017. Evaluation
issuance, evaluation of EOI responses	on Aug 10, 2017. Evaluation Report was completed
	for approval on Sep 14, 2017.
1.5.2 Finalization of the tender package for the	Ongoing. Draft OMC developed and discussed with
solicitation and selection of private Water Utility Operator	LWSC. To be finalized during in Year 1.
1.6 LWSC/LSC Charter Workshops - Consultation w	ith LSCs, LWSC, and other Stakeholders
I.6.1 Host the Charter workshop to develop a	Complete. Mar 22-25, 2017.
set of quarterly Work Plan	Complete. 1 Iai 22-23, 2017.

ACTIVITY	SCHEDULE
I.6.2 Draft Work Plan circulated to all	Complete.
stakeholders for feedbacks	
1.6.3 Finalization of Work Plans and adoption	Complete. April 2017
1.6.4 Implementation of Work Plan	Complete. Jul 2017 – Sep 2017
1.6.5 Quarterly Work Plans review and planning workshop	Complete. May 16-22, 2017. August 15-25, 2017.

Task 3: Transitional Management of Water Supply Improvements

rask 3. Transicional Flanagement of Water Supply Improvements			
2.1 Transitional management support in the interim before the completion of the CIP and the start of operations for the WTPs and the distribution systems			
2.1.1 Sustainability Monitoring Exercise in the interim before the completion of the CIP			
2.1.1.b Quarterly Joint Evaluation and Feedback Meeting with Monrovia Team participation	May 16-22, 2017 Aug 15-25, 2017		
2.1.1.c Submit Monthly Sustainability Monitoring Report to USAID and the LWSC	Apr 29, 2017- Report Period Mar 2017 May 29, 2017 – Report Period Apr 2017 Jun 28, 2017 – Report Period May 2017 Jul 29, 2017- Report Period Jun 2017 Aug 29, 2017 – Report Period Jul 2017 Sep 28, 2017 – Report Period Aug 2017		
2.1.2 Local Business Plan Review for period FY2017/2018 in the interim before completion of the CIP			
2.1.2.a Review Workshop discussions to review past performances and set new targets and strategies	May 8, 2017 - Complete		
2.1.2.b Development of draft Business Plans by local Outstation team	May 8 – Jun 9, 2017- Complete		
2.1.2.c Presentation of final Outstations Business Plans to LWSC for adoption.	May 9, 2017 - Complete		
2.1.3 Implement the Operation and Maintenance manuals in the three project cities during the interim period	Oct 2016 – Sep 2017 (Recurrent)		
2.1.4 Operator Audit Reports Biannually in interim before completion of CIP	Complete. May 2, 2017 – Report Period Oct 2016-Mar 2017		
2.1.5 Implementation of the water quality assurance plan in the interim before the completion of the CIP	Oct 2016 – Sep 2017 (Recurrent)		
2.1.6 Asset Management Plan - Assist LWSC to update Asset Management Inventory in the project cities	Draft Inventory was completed in Sep 30, 2017.		
2.4 Support to the LWSC to operationalize the Performance	mance Contract (PC)		
2.4.1 Work with the LWSC and the Ministry of Finance for the revision and resetting of targets and projections	Complete. As part of the Business Plan Process.		
2.4.2 Presentation of the revised of targets and projections to the LWSC BoD and the MFPD for adoption	Complete. As part of the Business Plan Process.		
2.4.5 Initial Report on Oversight on implementation status of PC and OMC	Period Jul 2016-Dec 2016 – submitted to LWSC on May 9, 2017. Period Jan 2017-Jun 2017- submitted to LWSC on Sep 25, 2017		
2.5 Support to the LWSC to operationalize the Outst			
2.5.1 Develop OMC Template with USAID and LWSC for acceptance / comments	Draft OMC finalized by LWSC on Oct 2, 2017.		

ACTIVITY	SCHEDULE				
2.6 Provide support for the implementation of the US	AID /LWSC / MFPD MOU				
2.6.1 Support LWSC to secure GOL financial commitments regarding subsidy of initial operations are allocated	Complete. As part of the Business Plan Process.				
2.7 Support LWSC to establish a private individual connection and financing strategy, as part of the communication and outreach plan					
2.7.1 Review, and support LWSC in finalizing policy and strategy for accommodating customers with direct piped connections	Delayed. Awaiting the finalization of the COA Strategy. Draft SOW to be subcontract to a local firm to develop and implement the COA strategy.				
2.7.2 LWSC approval of Policy and Strategy	Delayed pending the finalization of COA Strategy.				
2.7.3 Coordination with other Stakeholders and potential customers including LSCs, Arcelor Mittal, Robertsport Fish Project, etc.	Delayed pending the finalization of COA Strategy.				
2.8 Implementation of LSCs Work Plans					
2.8.1 Support and facilitate the development and finalization of the set of quarterly Work Plan	Complete. Jul 2017 – Sep 2017				
2.8.2 Provide support for the implementation of the set of quarterly Work Plan	Complete. Jul 2017 – Sep 2017				
2.8.3 Work with the LWSC for the Implementation of LSCs Work Plans	Complete. Jul 2017 – Sep 2017				
2.8.4 Quarterly Review meetings	Complete. May 16-22, 2017. August 15-25, 2017.				
Task 4: Capacity Building					
3.3.1 Final LMWP II Capacity Building Plan					
Review and Finalize LMWP / LWSC Capacity Building/Training plan	Complete.				
3.3.2 The twinning between LWSC and National Water and Sewerage Corporation (NWSC) of Uganda any other suitable regional utility operator)					
LWSC/NSWC Twining MOU – Revision and Extension	Twinning arrangement responsibility transferred to LWSC as part of the Capacity Building Plan Task Force in Mar 17, 2017.				
Explore the suitability of NWSC and/or other regional utility operator and make a recommendation to USAID and LWSC	Complete. Included as part of this annual report.				
3.3.3 Development of Communication and Outreach (Strategy (Sale and Marketing)	(BCC) & Social Marketing (BCO&SM) Marketing				
3.3.1 Support LWSC to review existing LMWP I/LWSC Communication and Outreach Plan.	Ongoing. Draft SOW to be subcontract to a local firm to develop and implement the COA strategy. Awaiting LWSC approval.				
3.3.2 Facilitate the development and finalization of the LWSC Communication and Outreach (BCC) & Social Marketing (BCO&SM) Marketing Strategy (Sale and Marketing)	Draft SOW to be subcontract to a local firm to develop and implement the COA strategy. Awaiting LWSC approval.				
3.3.3 Assist in Implementation Communication and Outreach; and Sales and Marketing Strategy, Training, and Plans of Action	Draft SOW to be subcontract to a local firm to develop and implement the COA strategy. Awaiting LWSC approval.				

ACTIVITY	SCHEDULE				
Task 5: Coordination with Other Donor and Partner Programs					
Regular Coordination Meetings with USAID Programs and other Donors	Oct 2016 – Sep 2017 (Recurrent)				
Regularly monthly Project Coordination Meetings with LWSC and AfDB/UWSSP PMT; Periodic trilateral Meetings with USAID/LWSC/LMWP	Oct 2016 – Sep 2017 (Recurrent)				
LWSC Consolidated Capacity Building Plan / Coordination					
Continue coordination with the AfDB/UWSSP, including synergizing its activities and implementation of the capacity building plan and with LWSC and other donors	Complete. Apr-June 2017				

ANNEX B: INSTITUTIONAL STRENGTHENING ACTIVITIES TO BE IMPLEMENTED DURING YEAR 2

The Table below outlines the activities scheduled to be implemented during Year 2, in accordance with the Work Plan submitted for approval to USAID on August 28, 2017:

ACTIV	/ITY	SCHEDULE	
3.1	Task I: Assist LWSC to Finalize and Implement an Institutional Framework and Business Model for Sustainable Management of Water Provision	Oct 1, 2017 - Sep 30, 2018	
3.1.1	Institutional Framework Review - Implementation of the IF	Oct 1, 2017 - Sep 30, 2018	
3.1.2	Prepare Roadmap plan and timeline for reaching cost recovery by the end of the Task Order	Oct 1, 2017 - Sep 30, 2018	
3.1.3	Design Review: Operationalization (Implementation Oversight) Tools for Cost Recovery (CR)	Oct 1-30, 2017	
3.1.4	Support LWSC to secure GOL financial commitments regarding subsidy of initial operations are allocated (in relation to activities 3.1.3 Design Review)	May 1, 2018 - June 30, 2018	
3.1.5	Support LWSC for contracting local firms for Private Water Utility Operator	Oct 1, 2017 - Mar 30, 2018	
3.2	Task 3: Transitional Management of Water Supply Improvements	Oct 1, 2017 - Sep 30, 2018	
3.2.1	Sustainability Monitoring Process (includes M&E data and roll up from feedback/evaluation meetings) of the Operator (OMC)	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.2	Operator Audit Reports Biannually	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.3	Financial procedures guidelines / Internal Process Mechanism	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.4	Technical assistance for Operation and Maintenance of the Outstations and the implementation of the O&M Manuals	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.5	Support for Water Quality Monitoring in accordance with LWSC's water quality monitoring plan	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.6	Asset Management Plan - Assist LWSC to update Asset Management Inventory in the project cities	Jan 2018 & Sep 2018	
3.2.7	Support to the LWSC to operationalize the Performance Contract (PC)	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.8	Provide support for the implementation of the USAID /LWSC / MFPD MOU	Oct 1, 2017 - Sep 30, 2018 (Recurrent)	
3.2.9	Support LWSC to establish a private individual connection and financing strategy, as part of the communication and outreach plan	Oct 1, 2017 - Sep 30, 2018	
3.2.10	Implementation of LSCs Work Plans	Oct 1, 2017 - Sep 30, 2018	
3.2.11	Local Outstation Business Plans development	Oct 1, 2017 - Sep 30, 2018	

ACTI	VITY	SCHEDULE	
3.3	Task 4: Capacity Building	Oct 1, 2017 - Sep 30, 2018	
3.3.1	Final LMWP II Capacity Building Plan	Oct 1, 2017 - Sep 30, 2018	
3.3.2	Development of Communication and Outreach(BCC) & Social Marketing (BCO&SM) Marketing Strategy (Sale and Marketing)	Oct 1, 2017 - Sep 30, 2018	
3.3.3	Water Utility Capacity Building Tool to measure the effectiveness the overall capacity building activities	Jan & Sep 2018	
3.3.4	Report for LWSC on Service Quality Improvemen t resulting from the twinning with NWSC	Sep 21-30, 2017	
3.3.5	Capacity Building Modules for LWSC, LSC and Private Operators	Oct 1, 2017 - Sep 30, 2018	
3.3.6	The twinning between LWSC and National Water and Sewerage Corporation (NWSC) of Uganda (or any other suitable regional utility operator)	Oct 1, 2017 - Sep 30, 2018	
3.3.7	Offsite Training in O&M including solar panel, slow sand filters with SWSC (To be confirmed)	Jan-Mar 2018	
3.3.8	OJT - On the Job training by UIP (As part of the one year OSOT - Oversight of the Operations and Maintenance by the CIP Contractor)	Oct 1, 2017 - Sep 30, 2018	

ANNEX C: SUMMARY NOTES FROM STAKEHOLDER MEETINGS DURING YIQ4

	Date	Type of Meeting	No. of Meetings	Highlights	Target Audience	Outcome
I	Aug 29, 2017	LMWP II/LWSC Project Coordination and Routine Meeting		Coordination/Updates meeting with the LWSC Managing Director LMWP II updates, CIP Construction updates, Outstations Operations updates and Communications and Outreach updates	LWSC Managing Director and DMD Technical Services	Project Update and Addressing Outstation Operations and management challenges
2	Aug 10, 2017	LMWP II/LWSC Project Coordination and Routine Meeting		LMWP II updates, CIP Construction updates, Outstations Operations updates and Communications and Outreach updates	LWSC DMDs (TS, Administration), Director-Operations, Outstation (Superintendent and Manager/MWP II Focal Person), PIU Manager	Project Update and Addressing Outstation Operations and management challenges
3	Sep 12, 2017	LMWP II/LWSC Project Coordination and Routine Meeting		LMWP II updates, CIP Construction updates, Outstations Operations updates and Communications and Outreach updates	LWSC DMDs (TS, Administration), Director-Operations, Outstation (Superintendent and Manager/MWP II Focal Person), PIU Manager	Project Update and Addressing Outstation Operations and management challenges

	Date	Type of Meeting	No. of Meetings	Highlights	Target Audience	Outcome
4	Jul 17, 2017	Outstation Management Contract (OMC) Procurement Meeting –	4	Outstation Management Contract (OMC) procurement review	LWSC MD, DMDs (Finance, Technical Services, Administration) Procurement Manager and Sales and Marketing Manager	Final draft OMC developed
5	Jul 24, 2017	Outstation Management Contract (OMC) Procurement Meeting – 2 nd	4	Outstation Management Contract (OMC) procurement review	LWSC MD, DMDs (Finance, Technical Services, Administration) Procurement Manager and Sales and Marketing Manager	Final draft OMC developed
6	Aug 4, 2017	Outstation Management Contract (OMC) Procurement Meeting – 3 rd	4	Outstation Management Contract (OMC) procurement review	LWSC MD, DMDs (Finance, Technical Services, Administration) Procurement Manager and Sales and Marketing Manager	Final draft OMC developed
7	Aug 9, 2017	EOI Evaluation Committee Meeting	I	Evaluation of TOR and SOP for the EOI Evaluation Committee	LWSC Administrative Manager, Procurement Manager, Account Receivable Manager, Outstation Superintendent	Evaluation Committee TOR and SOP validated and adopted

	Date	Type of Meeting	No. of Meetings	Highlights	Target Audience	Outcome
8	Aug 10, 2017	EOI Evaluation	I	Evaluation of respondents for the Request for Expression of Interest (REOI) for the potential private operators	LWSC Administrative Manager, Procurement Officer, Account Receivable Manager, Outstation Superintendent, Administrative Assistance-Technical Services	The most suitable respondents selected for the bidding process
9	Aug 18-25, 2017	LSC/LWSC/LMWP Quarterly Stakeholder Meeting: Communication and Outreach Sanniquellie: Aug 23, 2017 Voinjama: Aug 25, 2017 Robertsport: Aug 18, 2017.	3	LWSC/LSC community engagement, LWSC/LSC collaboration the past quarter, and LSC annual Work Plan review	LWSC Outstation Superintendent, OICs and/or Site Engineers, and LSCs for each target city	Level of LWSC/LSC collaboration reviewed, review of LSC/LWSC activities for the CIP, Communication and Outreach Campaign; and commencement of the LSC approved annual Work Plan
10	Aug 18-25, 2017	Joint Monitoring, Evaluation and Feedback Meeting Sanniquellie: Aug 23, 2017 Voinjama: Aug 25, 2017 Robertsport: Aug 18, 2017.	3	Outstations Performance review	LWSC Outstation Superintendent and OICs and/or Site Engineers, and LSCs for each target city	Progress is measured; and Provide feedback and corrective actions

ANNEX D: REPORT FOR LWSC ON SERVICE QUALITY IMPROVEMENT RESULTING FROM THE TWINNING WITH REGIONAL WATER OPERATORS (NWSC ETC.)

PROJECT BACKGROUND

Building upon the achievements of the Liberia Municipal Water Project (LMWP), funded by the United States Agency for International Development (USAID), the Liberia Municipal Water Project II (LMWP II) supports the construction execution and operation of water-supply infrastructure improvements in the project target cities of Robertsport, Sanniquellie, and Voinjama in Liberia. LMWP worked through the Liberia Water and Sewer Corporation (LWSC) to assist local and national authorities in developing plans for urban water supply and sanitation improvements, implementing water supply infrastructure improvements, and re-establishing local capability to sustainably operate and maintain the water-supply improvements. It is the goal of LMWP II to assist LWSC to establish improved water supply access in each city, with infrastructure managed and operated by locally based entities capable of sustaining the service both financially and technically. The improved water systems will provide public health and economic development benefits in the three target cities. The project coordinates with the Government of Liberia (GoL) through the LWSC, Ministry of Lands, Mines, and Energy (MLME), Ministry of Public Works (MoPW) and other ministries, agencies, and county and local authorities.

REPORT FOR LWSC ON SERVICE QUALITY IMPROVEMENT RESULTING FROM THE TWINNING WITH REGIONAL WATER OPERATORS - BACKGROUND

On September 7, 2017, LMWP II submitted its Capacity Building Plan, the main goal of which is to support LWSC to operationalize the agreed upon institutional framework including the national level Performance Contract and local level Outstation Management Contracts (OMC). LMWP II will support LWSC to build the capacity of outstations including LWSC staff, the local private operator, LSCs and other stakeholders involved in management of the water supply infrastructure improvements under the institutional framework.

The LMWP II Contract Scope of Works notes that "In order to carry out the above, the Contractor shall support LWSC on carrying out a twinning relationships and agreements among and between regional water operators for building its technical capacity in water supply and sanitation service delivery. The twinning partnerships can bring immediate, tangible improvements in operations and management for LWSC. LWSC has already initiated discussion with the National Water and Sewerage Corporation (NWSC) of Uganda. The Contractor shall explore the suitability of NWSC and/or other regional utility operator and make a recommendation to USAID and LWSC"

The Scope of Works also notes that "Key activities under this task are:

• The twinning for capacity building and technical and operational support between LWSC and National Water and Sewerage Corporation (NWSC) of Uganda or any other suitable regional utility operator."

Similarly, LMWP II Contract Deliverable 4.3 is "report for LWSC on service quality improvement resulting from the twinning with regional water operators (NWSC etc.)."

BACKGROUND OF TWINNING ARRANGEMENT BETWEEN LWSC AND NWSC

Under LMWP I, the process of establishing a Water Operators Partnership through a twinning relationship with a regional utility for technical support and capacity building have started. LMWP have supported LWSC to explore with regional water utilities including the Ghana Water Supply Corporation (GWSC) and the Uganda National Water and Sewer Corporation (NWSC).

Under LMWP I, the following meetings and discussions were held:

- LMWP facilitated its Chief of Party and the LWSC Managing Director to attend the "Africa Water Week" Conference in Dakar, Senegal on May 26-31, 2014. Conference attendees with whom they met included potential regional twinning partner utilities (e.g. Ghana Water Company Limited, Uganda National Water and Sewer Company)
- From June 27-28, 2016, the MD LWSC was invited along with the COP LMWP to attend a
 forum organized by NWSC in conjunction with International Water Association (IWA). The
 forum was held in Kampala, Uganda at the NWSC Training Center from June 27-28, 2016.
 Following attendance to the forum the MD LWSC and COP LMWP were able to meet with
 NWSC management to discuss a potential collaboration between both utilities.

A draft MOU for twinning was developed following the Uganda meeting to serve as a first step in the envisioned twinning arrangement between NWSC and LWSC for long-term technical assistance and support. The MOU was signed by both parties on September 10, 2015. However, the MOU for the twinning arrangement was put on hold and was not implemented by LWSC for a series of reasons including the following:

- To avoid duplication of efforts with the Management and Commercialization Training (MCT) consultancy funded by the AfDB during the same period
- The twinning arrangement could not be implemented due to financial constraints experienced by LWSC, which could not achieve the budget required to facilitate the twinning activities.

To help LWSC implement the twinning arrangement, LMWP II will facilitated NWSC's technical assistance as proposed in the Capacity Building Plan for the LMWP II project. Below is a summary of the proposed activities to be implemented with the support of NWSC.

TWINNING RELATIONSHIP WITH NWSC FOR TECHNICAL SUPPORT AND CAPACITY BUILDING UNDER LMWP II

LMWP II will provide a technical assistance support to LWSC with the objective that the inclusion of NWSC in delivery of capacity building modules will reaffirm the value that NWSC can provide to LWSC during the implementation of the institutional framework and beyond. This step will allow an engagement with both entities to develop a long term technical assistance and support which will continue beyond this project.

This will enable LWSC to follow up on the Performance Contract between GoL and LWSC, for effective oversight of the contract management for the OMC between LWSC and the outstations management (the private operator).

NWSC TECHNICAL SUPPORT

LMWP II will facilitate NWSC's technical assistance for the staff and management in relation to the support to the development of the outstation management contracts as well as the implementation and administration of the contracts with the private operators.

NWSC of Uganda will provide opportunities for LWSC to share experiences and gain valuable lessons learned on how to manage a contract (service management) between the water utility and private operators.

The Technical Assistance will also serve LWSC in the long term, to develop a working relationship with NWSC for extended technical assistance and support between the two utilities.

ACTIVITIES SCHEDULED TO BE IMPLEMENTED WITH NWSC ASSISTANCE

The Table below outlines the activities scheduled in the Capacity Building Plan to be implemented during the lifetime of LMWP II

AC	TIVITY	SCHEDULE
1.	The twinning between LWSC and National Water and Sewerage Corporation (NWSC) of Uganda	Oct 1,2017 – Sep 30, 2020
	a. Explore the suitability of NWSC and/or other regional utility operator and make a recommendation to USAID and LWSC	Nov 21 – Oct 30 2017
	b. Assist LWSC on carrying out a twinning relationships and agreements among and between regional water operators	Oct 1,2017 – Sep 30, 2020
2.	NWSC Technical Assistance for LWSC for the implementation of the OMC	Oct 1,2017 – Sep 30, 2020
3.	Build the capacity of the local authorities, namely LWSC and its local operator, and other stakeholders under the agreed water supply management institutional framework	Apr 2017 – Mar 2018
	c. Small Water Utility Management and Best Practices	Feb 2018 – Mar 2018
	d. Marketing, Customer Care, Quality of Service	Feb 2018 – Mar 2018
	e. Outstation Budgeting, Accounting, and Financial Management	Feb 2018 – Mar 2018
	f. Service Contract Administration and Management	Nov – Dec 2017



U.S. Agency for International Development

1300 Pennsylvania Avenue, NW Washington, DC 20523 Tel: (202) 712-0000 Fax: (202) 216-3524

www.usaid.gov