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Lebanon Water and Wastewater Sector Support

QUARTERLY REPORT: APRIL 2013 — JUNE 2013

July, 2013

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LEBANON WATER AND WASTEWATER SECTOR SUPPORT

QUARTERLY REPORT: APRIL 2013 — JUNE 2013

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Author: Samuel L. Coxson, Chief of Party

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ACRONYMS

ACWUA	Arab Countries Water Utilities Association	FAS System	Financial & Accounting
ADSL	Asymmetrical digital subscriber line	GA	Geographical Area
AFD	French Development Agency	GIS	Geographical Information System
AWP	Annual Work Plan	GIZ	Gezellshaft fur Internationale Zusammenarbeit
APP	Annual Work Plan	GNSS	Global Navigational Satellite System
ATP	Annual Training Plan	GOL	Government of Lebanon
BMLWE	Beirut-Mount Lebanon Water Establishment	GTZ	German Technical
BOQ	Bill of Quantities	Assistance	
BWE	Beka'a Water Establishment	HDSL	High-bit-rate digital line
CAS	Central Administration of Statistics	subscriber	
CCN	Cooperating Country National	HPIP	High Priority Intervention Program
CCTV	Closed Cable Television	HR	Human Resources
CDG	Chairman and Director	H&S	Health and Safety
General		IAR	Initial Assessment Report
CDM	Camp, Dresser and McKee Engineering	IEE	Initial Environmental
CDR	Council for Development and Reconstruction	Evaluation	
CRM	Customer Relations Management	IFI	International Financial
CIP	Capital Improvement Plan	Institution	
CO	USAID Contract Office	IRG	International Resource
COA	Chart of Accounts	Group	
CQCP	Construction Quality Control Plan	IRM	Information Resources Management
CSR	Customer Service Representative	IT	Information Technology
COP	Chief of Party	IWRM	Integrated Water Resource Management
COTR	Contract Officer Technical Representative	KPI	Key Performance Indicator
DG	Director General	LWWSS	Lebanon Water and Wastewater Sector Support Management Information System
DAI	Development Alternatives	MIS	
Inc.		MMS	Maintenance Management System
DCOP	Deputy Chief of Party	MOEW	Ministry of Energy and Water
DEP	Design Engineering Partners	MOF	Ministry of Finance
EIB	European Investment Bank	MOTGE	Mise en place des Outils Techniques de Gestion de l'Eau
EU	European Union	NLWE	North Lebanon Water Establishment
EA	Environmental Assessment	NRW	Non Revenue Water
EDL	Electricite du Liban (National Electricity Provider)	NWSS	National Water Sector
EMMP	Environmental Monitoring and Mitigation Plan	Strategy	
ERP	Enterprise Resource Planning	O&M	Operations and Maintenance
EOI	Expression of Interest	PMP	Performance Monitoring Plan

PSP	Private Sector Participation
PPM	Parts per million
PPP	Public Private Partnership
SCADA	System Control and Data Acquisition
SLWE	South Lebanon Water Establishment
SMP	Subcontractor Management Plan
SOW	Scope of Work
STTA	Short-Term Technical Assistance
TBC	To be confirmed
TOR	Terms of Reference
USAID	United States Agency for International Development
USG	United States Government
WE	Water Establishment
WET	World Engineering and Technology
WPS	Water Pumping Stations
WWTP	Wastewater Treatment Plant

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LWWSS Counterparts and Primary Contacts

Beirut-Mount Lebanon Water Establishment (BMLWE)	Joseph Nseir
Beka'a Valley Water Establishment (BWE)	Maroun Msallem
North Lebanon Water Establishment (NLWE)	Jamal Krayem
South Lebanon Water Establishment (SLWE)	Ahmed Nizzam
Ministry of Energy and Water	Ghassan Beydoun
MOEW Advisor to Minister (Wastewater)	Randa Nemer

A. INTRODUCTION

The Lebanon Water and Wastewater Sector Support (LWWSS) Program is a \$34 million, 67-month (October 2009 - April 2015) program funded by USAID and implemented by Development Alternatives, Inc. (DAI). LWWSS provides technical assistance and related services to impact USAID/Lebanon's Assistance Objective (AO) 4 - "Improved water services for all in Lebanon" - and the corresponding Intermediate Results (IRs) - more efficient management of water resources, improved water infrastructure, and enhanced water governance.

LWWSS works in cooperation with the Ministry of Energy and Water (MOEW) to assist Lebanon's four Water Establishments (WEs) in strengthening their capacity to deliver high-quality and sustainable services. Ultimately, the LWWSS program aims to help the WEs advance towards financial and operational sustainability and overcome the many challenges they face, including staff shortages and an aging workforce, poor customer relations, low tariffs that fail to recover operating costs, lack of metering, excessive non-revenue water, and underinvestment in the water and wastewater infrastructure.

The areas of focus that LWWSS targets in working with the WEs include:

- Building management capacity within the WEs;
- Increasing financial management capacity and financial system integration;
- Procuring equipment to complement technical assistance and capacity building;
- Business planning to increase capital planning and benchmarking capacity;
- Funding urgent infrastructure works to enhance delivery or access and coverage;
- Developing a corporate culture, customer service orientation and public outreach programs.

Based on the initial LWWSS program objectives of building on previous USAID and other donor program progress and as a result of lessons learned during the first two years of the program, LWWSS has focused on implementing its Year-Three Work Plan within specific areas of Water Establishment (WE) operations. The LWWSS program has, therefore, tailored the individual WE work plans to apply the information gathered on each WE and to leverage the successes accomplished to date.

This Quarterly Report covers the period from April 2013 – June 2013 and provides quarterly highlights, component updates that provide technical perspective, and then details progress of project activities broken down by each Water Establishment and then further by each component, as per the Year Four Work Plan. Each component consists of several activities, and progress of each is depicted in the accompanying Gantt charts and detailed in the narrative. Additionally, this quarterly report includes the preliminary PMP tables that report progress on the indicators for the first half of year four of the project.

B. QUARTERLY ACTIVITY HIGHLIGHTS

USAID builds the capacity of employees at the 7 branches of the South Lebanon Water Establishment in GIS application



Above and below: Introductory session for the heads of departments.

USAID has commenced the GIS application training for the South Lebanon Water Establishment (SLWE) on April 17, 2013. This training aims to build the capacity of engineers and pumping station operators at the seven SLWE branches in the use of the newly installed GIS system. Its main objectives are to organize and integrate the data collected from the SLWE pumping stations into GIS, as well as to use customized tools to manage and maintain these data in a systematic and user-friendly interface.



An introductory session was first carried out to the Heads of Branches, with the purpose of explaining the objectives and advantages of the GIS application. This was followed by an on-the-job training session targeting the personnel at the Saida branch. The session covered the following sub-topics:

1. Geo-database Organization;
2. Layers and System Tables;
3. Implemented Tools;
4. Custom queries;
5. Importing and exporting CAD Data;
6. Generating reports and Backing up the system.



Session at Saida branch.

Training sessions for the remaining branches (Tyr - Nabatiyeh - Marjeayoun and Hasbaya - Bent Jbeil - Zahrani - Jezzine) will continue throughout June 2013.

USAID Decreases Water Losses for 22,295 inhabitants of the Bekaa by Upgrading of the Existing Networks in Zahle



Above and below: Construction workers conducting trial pits and excavation works at the Zahle Midan sector.



USAID's Lebanon Water and Wastewater Sector Support Program (LWWSS) initiated the rehabilitation of the existing Zahle networks, from which around 22,295 inhabitants will benefit from increased water supply, fewer water cuts, and better water quality.

Zahle is the Bekaa's largest urban center, has the highest number of subscribers among cities in the Bekaa (20 percent). However, its water network is reported to be the most deteriorated because of aging infrastructure and lack of capital investment. The deterioration of the pipes in Zahle, some of which dating back to the 1950s, is causing one of the highest financial burdens on the Bekaa Water Establishment. As such, the Water Establishment estimates that in some areas, the deterioration of pipes is resulting in 50-60% physical water loss due to continuous, unnoticed leaking as well as frequent breakage.

This activity falls within the Water Establishment's two-year urgent strategy dated December 2010 and the WE's forthcoming business plan. Works have started on May 27 in the Zahle Midan sector, where trial pits are being excavated in order to locate the existing networks. Rehabilitation will cover a total of 15 sectors in Zahle, selected based on the Water establishment's most urgent needs. The project will provide 10.5 km of pipelines and new network extensions.

USAID builds the capacity of 28 operators from 11 Bekaa Water Establishment Pump Stations serving around 30,000 people



Above: Pump Station operators with USAID toolkit at Shamsine station.

Below: Training session at BWE Lucy Station.



Above: Practical training on pump operation and maintenance.

USAID has commenced the Operations and Maintenance training for the Bekaa Water Establishment (BWE) on June 4, 2013. This 12 days training targets 28 operators from 11 Pump Stations at the BWE, and will be carried out between June and July 2013.

This activity aims at improving skills and processes for pump station staff in operating and maintaining pump station plant and equipment, as well as improved health and safety practices.

The training course consists of in-class and on-site training, covering all the basic aspects of operating and maintaining a pump station, including:

- Operating the mechanical and electrical equipment;
- Cleaning and maintaining the equipment;
- Electrical, hydraulic and chemical health and safety procedures;
- Facility management basics;
- Chlorinator reading and operating basics;
- First aid.

The Operations and Maintenance of pump stations are critical for ensuring a reliable water supply to citizens. Thus, as a result of the training, a population of over 30,000 in Central and South Bekaa served by the 11 pump stations will benefit from better water supply.

Updated financial and accounting processes help the North Lebanon Water Establishment meet International Accounting Standards



North Lebanon Water Establishment's finance team undergoing training in relation to the Chart of Accounts in Tripoli.



Training session of the Public Finance and Accounting Management Training.



Distribution of certificates in presence of the NLWE DG and LWWSS COP.

The North Lebanon Water Establishment suffers from outdated financial and accounting methods and processes that do not meet the financial reporting requirements of the Government of Lebanon or international accounting standards. The water establishment's staff had to conduct double entry to input accounting data into two separate and incompatible sub-systems within the accounting software: the cash and the accrual based accounting systems.

To help the water establishment meet international standards, the USAID Lebanon Water and Wastewater Sector Support (LWWSS) Program just completed the implementation of a project that updates the financial and accounting methods through a new chart of accounts and the introduction of the concept of cost and profit centers. This activity enabled the NLWE to use their existing accounting systems (PIMS) up to twice more efficiently by linking the accrual based accounting methods to the cash accounting methods within the PIMS system. This enables the reduction of the data entry time by half, and the minimization of human error, as well as an increased accuracy and flexibility within the system. Twelve days of public finance and accounting management training were conducted between February and April 2013 targeting 28 employees working at the Financial & Accounting department of the NLWE. Participants were introduced to six core modules including applications in public financial management and budget preparation, budget execution, public accounting and financial reporting, general accounting and financial analysis, public procurement, taxation and financial reports.

The NLWE Head of Finance Department, Mr. Maher Tahsildar, has reported on the benefits of the training to the department staff by stating:

"This training has built the capacity of staff in using up-to-date financial processes. It has introduced both the old and the 14 newly recruited employees to the different functions of the financial departments, thus fostering better collaboration between them."

The participants were awarded certificates of participation in the training in a concluding ceremony held on June 12, 2013.

C.PROJECT PROGRESS BY WATER ESTABLISHMENT AND COMPONENT

Project activities are broken down by each water establishment and then further by each LWSS component, in conformance with the Year Four Work Plan. Each component consists of several activities, and progress of each is depicted in the Gantt charts and detailed in the narrative.

1. Beka'a Water Establishment (BWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
2.2	Building the WEs' Water Quality Management Capacity: Water Quality Testing Plan			
2.2.1	Conduct water quality baseline survey based on seasonal sampling of all sources, with on-the-job staff training	AUB	Activity Completed	July, 2013
2.2.2	Establish a region-specific and Libnor-compatible testing protocols and methodology	AUB	Activity Completed	December, 2012
2.2.3	Plan and conduct a comprehensive user training on all aspects of lab operation	AUB	Activity Completed	April, 2013
2.3	Capacity Building in Operation and Maintenance of Pump Stations			
2.3.1	Pump station operators basic O&M and H&S training (70+ staff)	CDM (BG, GT), LWWSS (MK) Kredo	Activity Completed	May, 2013
2.4	Public administration and Process Management Training			
2.4.2	Public administration and process management training aiming at increasing staff familiarity with WE systems and processes	- EMC (MC), DAI (MK) - Local supplier (TBD)	Training completed Follow-up in place	June, 2013
2.5	Training on Network Maintenance and Repair			
2.5.1	Basic training on network maintenance, monitoring and repair, for existing and newly recruited network team personnel	- DAI (MK) - Kredo/TBD	Training completed Follow-up in place	June, 2013

BG-Bassem Ghayda; MK-May Koleilat; GT-Gulnard Ters; MC-Mike Chalah

Activity 2.2 - Building the WEs' Water Quality Management Capacity

This activity with the American University of Beirut (AUB) started on October 1, 2011 and ends on April 30, 2013. The contract with AUB stipulates the following deliverables and dates:

Deliverable 1 due in November 30, 2011: Review and document the management of the potable water supply by the Bekaa Water Establishment

Status: This deliverable and AUB's report associated with it was completed in year three.

Deliverable 2 due in October 31, 2012: Conduct a comprehensive baseline water quality surveillance of sources feeding distribution networks and piped water supplied by BWE across its service territory.

Status: As reported earlier, this activity was postponed due to a delay in the chemical water assessment testing caused by a breakdown in AUB's water testing equipment (at no cost increase to the purchase order). After the LWWSS revision of AUB's report, AUB sent a second draft on April 18, which was reviewed by the LWWSS program team and additional comments were sent to AUB around the end of May. AUB's third draft report was received on June 27. It will be reviewed by the LWWSS program team and the final version is expected to be completed in July.

Deliverable 3 due in October 31, 2012: Develop a comprehensive potable water quality monitoring program.

Status: This deliverable was issued to DAI on October 31, 2012. DAI's review and comments were incorporated by AUB in December, 2012.

Deliverable 4 due June 1, 2012: Plan the location and specifications of laboratory units (locations, numbers and specifications) needed to implement potable water quality monitoring and prepare an inventory of required laboratory equipment and supplies.

Status: This deliverable by AUB was completed.

Deliverable 5 due in December 31, 2012: Design and implement a capacity building training program to enable the water establishment staff to conduct monitoring and quality assessment activities.

Status: Following the Water Quality Monitoring training conducted in the second quarter, the on-the-job training on water quality for the Bekaa Water Establishment's Technicians continued in April 2, 4, and 9, 2013. The training involved assignments that were conducted at the BWE laboratory. Also, at the training conclusion, the participants underwent a written and practical exam.

Consequently, AUB sent a training report which was reviewed by the LWWSS team for review. A certificate award ceremony will be held with the inauguration of the new laboratory.

deployed to the branches. This was rejected until the LWWSS program justifies the lack of deployment of the billing and collection module at BMLWE. The LWWSS program advised the BWE DG to independently purchase the urgently needed PCs in the meantime.

Additionally, starting mid-May, a minimum number of follow up visits were conducted to the BWE departments due to shortage in the EDM contract funds (explained in Challenges section below). In addition to the visits, an EDM team viewer was in contact with the BWE IT department remotely in order to provide support with pending issues. On the other hand, the visits served to review the ERP reports, resolve the pending issues, and migrate the data of 2012 in order to close the accounts. The visits showed that all the FAS modules are fully operational and up to date. In addition, reports from the following modules are being generated: procurement; Budget; Payroll; HR; Inventory; Accounting; Billing and collection; CRM; Registration and documentation.

Challenges

- The slow communication flow between module users (such as between the procurement and inventory modules) is hindering the update and accuracy of data, as well the timeliness of reports generated. To resolve this issue, the DG must enforce the communication process between the departments by institutionalizing the designation of personnel to corresponding modules, as well as establishing cooperation mechanisms that need to exist in order to facilitate the ERP process.
- To continue activities until end of September, as planned, a request will be sent in the beginning of the fourth quarter to the CO to approve increasing the ceiling of EDM's contract. The increase (\$20,000) is due to shortage of funds caused mainly by the delays experienced while implementing the ERP in BMLWE, where implementation was due to end in March but continued until May. Another cause was the excessive requests by the BWE for hardware support, supposed to be carried out by its own IT department but is too weak to do so.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	(FY	Y-2 (FY11)					Y-3 (FY12)					Y-4 (FY13)														
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4													
		A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
3.2	The Enterprise Resource Planning (ERP) Platform																										
	Activity introduced*																										
	Initial assessment																										
	Implementing accounting prerequisites																										
	Implementing prerequisite training (finance, accounting, etc)																										
	Pilot processes applied and tested																										
	IT infrastructure survey																										
	Procurement of IT infrastructure																										
	Process mapping completed, software specifications drafted																										
	Procurement of software design and implementation																										
	System implementation, adoption, user training, and migration**																										
	Provide on site support for a period of 12 months																										
	* All tasks are as per Year Two work plan amendment #2																										
	** Delays first reported in Year Three fourth quarterly report																										

Legend

- Time frame as planned
- Delays indicated in Year Four Workplan
- Delays detailed in Q2 report
- Delays detailed in Q3 report

Component 4: Capital Investment Planning and Program/Project Management

Work Plan Activity

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
4.4	Master planning			
4.4.1	Water Supply and Sewerage Master plan	Local subcontractor (TBC) Valuadd	- Activity SOW defined, activity started (Year 3)	September, 2013

Activity 4.4 - Developing Water Supply and Sewerage Master plan

In April, the LWWSS team and DAI’s consultant Mr. Philip Giantris reviewed Kredo’s draft inception report and comments were sent by letter to Kredo., who are following up based on the revision. In May, Kredo submitted the final version of the Inception Report, which was reviewed and approved by the LWWSS team. Furthermore, the Population Estimates were submitted by Kredo in June, and were reviewed and commented by the LWWSS team. Meanwhile, the assessment of the water supply system is ongoing.

LWWSS anticipates the implementation period of this activity will last 16 months (December 1, 2012 – March 31, 2014).

Component 5: Procurement of Technical Equipment to Strengthen WEs

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
5.4	Upgrading the Water Analysis Laboratories			
5.4.1	Upgrade the water testing laboratories with infrastructure and equipment	AUB Local suppliers	- Urgent equipment provided Y1-Y3 - Comprehensive equipment supplied as per AUB specs (Y4)	September, 2013
5.4.2	Establish service agreements, and conduct user training programs for the above activities	AUB LWWSS (MK)	- Activity in progress	September, 2013

MK-May Koleilat

Activity 5.4 – Upgrading Water Analysis Laboratories

Lab equipment

Following the award of the supply of the Zahle laboratory equipment to Multilab C.S.C., the laboratory equipment and consumables arrived at Beirut International Airport on June 20, 2013 and were cleared by the end of the month. An inspection check will be conducted by the first week of July. Since the laboratory is currently being rehabilitated, all equipment and consumables will be stored in a safe place at the vendor's warehouse, to be delivered to the BWE laboratory once the rehabilitation is completed. Training on the received equipment will be provided to the Zahle laboratory operators by the vendor Multilab.

Lab Rehabilitation

The bidder Sanabel s.a.r.l. was recommended by the evaluation committee as the winning bidder to execute the Rehabilitation of the Water Analysis Laboratory in Zahle for the BWE in compliance with the Technical Specification of the RFP with a delivery time of 16 weeks.

In April, the contract was signed and a kick-off meeting was held with Sanabel in presence of the LWWSS team and the CDM engineers who will be supervising the activity. This was followed by a site visit to the laboratory to provide site access for Sanabel to start the work.

In May, works started and Sanabel presented the shop drawings and submittals of materials equipment, pipes, and other for review and approval by CDM Smith engineers.

By mid-May, the General Director of BWE Mr Maroun Mousallem requested additional works to be carried out during rehabilitation; these included: waterproofing the roof and sealing the roof window, among other works. Sanabel provided a quotation regarding the cost of these additional works which were not included in the original scope of work, excluding the waterproofing works. Following revision of the offer and negotiations, the vendor decreased the quotation price and resubmitted a revised quotation by the end of June for the supply and installation of the required items. The quotation was

approved by the LWSS program after having verified average price rates with other local suppliers. It is expected that Sanabel will finalize the laboratory rehabilitation by end of September, 2013. Offers are being obtained separately for the waterproofing works.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-3 (FY12)					Y-4 (FY13)												
		Q3		Q4			Q1		Q2		Q3		Q4						
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
5.4	Upgrading the Water Analysis Laboratory																		
	Finalize laboratory layout and commence procurement																		
	Deliver and install equipment, complete works																		
	Establish service agreements and provide user training																		

Legend

 Time frame as per Year Four Work Plan

Component 6: Small- to Medium-Scale Infrastructure Work on Water and Wastewater in the BWE

Workplan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
6.1	Decreasing Water Losses and Upgrading Existing Networks			
6.1.1	Design network upgrades in Zahle: rehabilitating the water supply network of the region of Mar Elias	LWSS (WA) Local Engineering Firm (W.E.T)	Design completed; Supervision Started	January 2013
6.1.2	Implement network upgrades in Zahle: rehabilitating the water supply network of the region of Mar Elias	Local Engineering Firm (W.E.T) Local subcontractor (Nicolas Srouji)	Contract placed, Works commenced	May 2013
6.1.3	Design network upgrades in Zahle: rehabilitating five branch networks in Hautoche el Oumara, Maalaka, Rassieh, Karak-Forzol and Midan	LWSS (WA) Local Engineering Firm (W.E.T)	Works continue	February 2014
6.1.4	Implement network upgrades in Zahle: rehabilitating five branch networks in Hautoche el Oumara, Maalaka, Rassieh, Karak-Forzol and Midan	Local Engineering Firm (W.E.T) Local subcontractor (Nicolas Srouji)	Works continue	February 2014

*Activities 6.1.1 and 6.1.3 are combined under one service subcontract for engineering design and supervision.

**Activities 6.1.2 and 6.1.4 are combined under one infrastructure works subcontract.

WA- Walid AbouZeid.

Activity 6.1 - Decreasing Water Losses and Upgrading Existing Networks

On Friday April 19, 2013 DAI received the USAID CO consent to subcontract “NICOLAS SROUJI Establishment for Contracting”. The contract was signed by both parties late April and a kick off

meeting was held at the BWE in presence of the supervising consultant W.E.T, the LWWSS team, and the BWE Director General on May 9, 2013.

During the meeting it was agreed that the works should start in the following sectors according to priorities set by BWE:

- 1- Midan I - Midan II pipelines
- 2- Mar Elias pipeline - El Rassieh II pipeline
- 3- Maalaka I - Maalaka II pipelines
- 4- Haouch Al Oumara I - Haouch Al Oumara II pipelines

Following the meeting a site handing over was made in presence of the LWWSS program' Engineer Khalil Klink, Mr. Tony Bou Farah from BWE, Engineer Fady Hatoum from W.E.T, and Engineer Walid Freiha representing the subcontractor. All locations were visited and minutes of site handover were signed by all the parties present.

On May 24, 2013 the notice to proceed was given to the subcontractor following the provision of a Bank Guarantee in the amount of 20% of the total contractual agreement, a Health and Safety Plan, as well as the required insurances. Subsequently, on-site works started on May 27, 2013.

After having completed the trial pits in Midan areas I and II, as well as Mar Elias and Rassieh areas I and II, the excavation works started in early June, with progress of work by the end of the month as follows:

- In Midan I: For the whole line: Cutting of asphalt, Excavation, Bedding, Laying of 110mm and 50mm HDPE pipes, Backfilling with bedding material, Compaction, Warning Tape, Backfilling of the rest of the trench with base course.
- In Midan II: For the whole line: Cutting of asphalt, Excavation, Bedding, Laying of 90mm HDPE pipe, Backfilling with bedding material, Compaction, Warning Tape, Backfilling of the rest of the trench with base course.
- In Mar Elias: for 800m of the line: Cutting of asphalt, Excavation, Bedding, Laying of 200mm DI pipe, Backfilling with bedding material, Compaction, Warning Tape, Backfilling of the rest of the trench with base course.
- In Rassieh I: For the whole line: Cutting of asphalt, Excavation, Bedding, Laying of 90mm HDPE pipe, Backfilling with bedding material, Compaction, Warning Tape, Backfilling of the rest of the trench with base course.
- In Rassieh II: Works started on June 26.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-2 (FY'11)				Y-3 (FY'12)				Y-4 (FY'13)				Y-5 (FY'14)														
		Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4								
		M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
6.1	Decreasing Water Losses and Upgrading Existing Networks in Zahle																											
	Projects introduced*																											
	Hiring project personnel; conducting technical investigation																											
	Drafting engineering SOW, appointing engineering subcontractor																											
	Engineering design stage and preparation of bid package																											
	Procurement and contract signature with infrastructure subcontractor																											
	Site implementation stage																											
	Completion of both projects**																											
	* Year Three work-plan																											
	** End date as per DAI LWWSS follow-on contract mod #3																											

Legend

- Time frame as planned
- Delays detailed in Q2 report

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Workplan Activity

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
7.6	Consumer-Targeted Awareness Programs			
7.6.3	Outreach material promoting public awareness and education on water conservation	- LWWSS (NB) - Local subcontractor (Byblos Printing)	- Activity completed	March, 2013

NB- Nathalie Bavitch

Activity 7.6 - Outreach material promoting public awareness and education on water conservation

This activity was completed in March 2013.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-3 (FY12)		Y-4 (FY13)															
		Q3		Q4		Q1		Q2		Q3		Q4							
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
7.6	Promoting public awareness and water conservation																		
	Activity introduced																		
	Develop concept and content																		
	Discuss content and agree with WE management																		
	Obtain USAID approval on content, print and share																		

Legend

 Time frame as per Year Four Work Plan

2. Beirut-Mount Lebanon Water Establishment (BMLWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

There are no component two activities with BMLWE in the year-four work plan.

Component 3: Increase Financial and Commercial Viability of Water Establishments

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
3.1	Upgrade Finance and Accounting Standards and Methods			
3.1.5	Develop procedures and a standard manual for yearly budgeting within the WE, and conduct applied training to key departments.	- EMC (MC), - ABA	- Procedures defined, manual produced, training conducted.	September, 2013
3.1.7	Develop module, procedures and provide training on the Cost Tariff Model for Strategic Planning and	- EMC (MC), ABA	- Module installed, connected to ERP - Procedures	September, 2013

	Budgeting		defined, training conducted	
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.2	Implement software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC), ABA EDM	- Activity completed	October, 2012
3.2.3	Implement intranet system enabling web-browser based e-training, communication and business process tools	EMC (MC), ABA EDM	- Activity completed	March, 2013
3.2.4	Conduct training, assist in transition phase and provide one/two year on-site support	EMC (MC), ABA EDM	- Activity completed	September, 2013

MC-Mike Chalah, ABA-Allied Business Advisors

3.1.5 - Develop procedures and a standard manual for yearly budgeting within the WE, and conduct applied training to key departments

Mr. Chalah and the LWWSS' program subcontractor ABA continued their work on the budget manual that is based on BMLWE's five-year business plan. The manual will include the following nine sections:

- Introduction
- Budget Preparation
- Budget Execution
- Budget Transfer
- Policies and Procedures
- Closing Annual Budget
- Forecast Budgeting and Planning
- Budget Control
- Attachments

The manual theoretical part was reviewed and finalized by ABA and the LWWSS financial specialist in April. In May, the ABA Senior consultant with the LWWSS financial specialist conducted a visit to BMLWE's budget department in view of discussing the manual. Based on comments from key employees of the budget department, the LWWSS financial specialist and ABA started developing the application forms of the manual, such as the revenue templates, the operation and maintenance templates, the Payroll, Staff Analysis, as well as Capital Investment templates. These templates serve to enhance the compatibility of the manual with the BMLWE systems, therefore making it easier to be trained on and applied.

After the finalization of the manual templates, the LWWSS financial specialist and ABA will conduct a training for five people from BMLWE who are working in the finance and budget department (one financial manager, three supervisors, and one accountant). The training is planned for August 2013.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	(FY	Y-4 (FY13)											
		Q4	Q1			Q2			Q3			Q4		
		A	S	O	N	D	J	F	M	A	M	J	J	A
3.1.5	Develop procedures and a standard manual for yearly budgeting													
	Activity introduced*													
	Investigate, and define key best practices in budgeting													
	Draft budgeting manual and establish linkages with ERP solution													
	Issue final manual and conduct training and follow-up													
	* Year-Four Work Plan													

Legend

-  Time frame as planned
-  Delays detailed in Q3 report

3.1.7 - Develop module, procedures and provide training on the Cost Tariff Analysis Module for Strategic Planning and Budgeting

As per the year four work plan, LWWSS’ Financial Specialist Mike Chalah and subcontractor ABA will update the cost tariff analysis module (originally developed by the USAID LWPP project in 2004) and connect it to the ERP platform. This will enable the module to fully utilize the ERP solution’s output and provide BMLWE management with a strong financial, analytical and planning tool for costing and tariff to improve their decision making process.

During the second quarter, Mr. Chalah and the LWWSS’ program subcontractor ABA continued their work on the cost tariff analysis which is composed of the following nine sections with Excel sheet templates that will be linked to the ERP:

1. Assumptions
2. Scenarios
3. Consolidated results
4. Cost Recovery
5. Income Statements
6. Variable expenses
7. Main fixed expenses
8. Project expenses
9. General expenses

In May and June, the LWWSS financial specialists and ABA developed the following module templates:

- Accrual base income statement and cost recovery ratios for water/wastewater;
- Water balance-revenue details and analysis, with details of costs for each source or main pumping station;
- Details of costs for wastewater treatment plants and network;
- Revenue per unit;
- Cost per unit;
- Financial terms and operational changes;
- Tariff scenarios and their potential effect on revenues and cost recovery.

After the module finalization, it will be connected to the ERP and a training will be conducted with six people from BMLWE’s financial department (financial manager, accountant, and four supervisors).

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-3 (FY12)					Y-4 (FY13)											
		Q3			Q4		Q1		Q2		Q3		Q4					
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
3.1.7	Develop module and training on the Cost Tariff Analysis Module																	
	Activity introduced																	
	Conduct data collection from finalized modules of the ERP																	
	Conduct modeling, update model and connect to ERP platform																	
	Develop user manual, train and follow-up																	

Legend

 Time frame as per Year Four Work Plan

Activity 3.2 - Integrating the WE's Financial, Accounting, Customer Service and Business Process Systems

Enterprise Resource Planning System Progress

Following the meeting in March attended by BMLWE staff, including the Director General for part of it, USAID, the WISE team (which needs the billing and collection module for its activities), EDM, and the LWSS team, DAI received on March 22, minutes of meeting from the DG, which included a list of issues BMLWE wanted addressed. The LWSS program responded in a letter on March 28 addressing the points raised, providing a timeframe for concluding the pending activities, and pointing out EDM's requirements to be able to meet that timeframe.

Upon BMLWE's request, a meeting with BMLWE IT staff was then held on April 5 in which the contents of the letter were discussed in detail and clarified, and the two parties agreed on the next steps. This was summed up in a letter sent on April 11 to the BMLWE DG, mainly including an action plan for the finalization of the Billing and Collection module in Tallet El Khayat and resolving any pending issues of the FAS modules. The DG responded on April 25 with a letter agreeing to the plan and specifying a deadline to complete all activities set at May 31, 2013, even though the proposed workplan by LWSS and EDM team required more time. This deadline does not include the deployment of the Billing and Collection module to the other branches. This decision will have to be taken by BMLWE senior management.

Thus, in May, the LWSS financial specialist and EDM conducted a rapid assessment of all modules. The pending issues were resolved through training of users, checking and migration of data. However, some departments were not very facilitative of the communication exchange process within the WE, which is essential for the functioning of the ERP. In addition, some BMLWE staff requested many modifications that were not feasible during the time allocated. Therefore, LWSS and EDM could only complete the performance test phase of the agreed upon work plan, and generate all financial reports of the FAS modules from the new system.

Accordingly, work at BMLWE in relation to the ERP ended in May, with the billing and collection module deployed in the pilot branch but not finalized with the establishment. The LWSS program sent the Director General of BMLWE a letter beginning June requesting sign-off and/or comments on all ERP

modules, and reminding him of his commitment to maintain and support the system and its users beyond May. No official response was received from Mr. Nseir in June, although the head of the IT Department informed the LWWSS Financial Specialist that the BMLWE identified a company to take over support and maintenance of the ERP and that a meeting will be called, once that contractor has assessed what is needed from DAI, to carry on its work.

Challenges are detailed below in *Section G: Challenges, Problems, Issues*.

Component 4: Capital Investment Planning and Program/Project Management

There are no component four activities with BMLWE in the year-four work plan.

Component 5: Procurement of Technical Equipment to Strengthen WEs

Work Plan Activity

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
5.2	Upgrading Pumping and Energy Efficiency			
5.2.5	Establish service agreements, and conduct user training programs for the equipment provided in the Jeita pump station	- CDM (BG, GT), DAI (MK) - Local subcontractors (Geobaco)	- Activity completed	September, 2013

BG-Bassem Ghayda; GT-Gulnard Ters; MK-May Koleilat

Activity 5.2 - Upgrading Pumping and Energy Efficiency

Jeita Pump Station Equipment Replacement

The pump station rehabilitation was completed as reported in February 2013.

Operations and Maintenance training

In the third quarter, the preparations for the Jeita Pump Station Operations and Maintenance training were underway. In that regard, a meeting was held on June 14, 2013 between the Head of the BMLWE Stations Eng. Ghada Rida and Kredo’s Representative Eng. Kamil Moghabghab. The meeting’s objective was to discuss the training preparation and assess the training material.

Following the meeting, Kredo’s trainer conducted a site visit to the Jeita Pump Station on June 28, in order to examine the training site and continue follow up with BMLWE. The training will be conducted in the fourth quarter of year four.

Component 6: Small- to Medium-Scale Infrastructure Water and Wastewater Projects

There are no component six activities with BMLWE in the year-four work plan.

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Work Plan Activity

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
7.6	Consumer-Targeted Awareness Programs			
7.6.3	Outreach material promoting public awareness and education on water conservation	- LWWSS (NB) - Local subcontractor (Byblos Printing)	- Activity completed	March, 2013

NB- Nathalie Bavitch

Activity 7.6 - Outreach material promoting public awareness and education on water conservation

This activity was completed in March 2013.

3. North Lebanon Water Establishment (NLWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

Work Plan Activity

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
2.3	Build Pump Stations Operators Capacity in Operation and Maintenance			
2.3.2	Pump station operators advanced training in O&M	- DAI (MK) - Kredo	- Activity started	Dec, 2012

MK-May Koleilat

Activity 2.3 – Building Operators’ Capacity in Operation and Maintenance of Pump Station Equipment

This activity was completed in November 2012, as per the year four work plan.

Component 3: Increase Financial and Commercial Viability of Water Establishments

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
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3.1	Upgrade Finance and Accounting Standards and Methods			
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing	EMC (MC)*, LWWSS (MK)	Training completed Follow-up in place	April, 2013
3.1.6	Develop procedures and a standard manual for internal audit within the WE, and conduct applied training to key departments.	EMC (MC), ABA	Procedures defined, manual produced, training conducted.	September, 2013

MC-Mike Chalah; MK-May Kolielat; ABA-Allied Business Advisors

3.1.2 - Training in Public Accounting, Finance, Procurement, Auditing

This activity is a continuation of the year three group of activities relating to an update of the financial and analytical accounting methods in NLWE, through a new chart of accounts and the introduction of the concept of cost and profit centers. A period of time is necessary to ensure that the NLWE finance department staff have adequately applied the new chart of accounts and the cost and profit cost center concept application prior to providing additional training. This training was rescheduled until the middle of year four based on LWWSS' communication and agreement with NLWE Director General. The training relates to matters of public accounting, accrual based accounting, procurement and auditing, and augments the capacity of the WE staff to adopt accrual accounting standards while meeting the government of Lebanon's requirements and regulations.

The 12-day training targeting 28 trainees working in the Financial and Accounting department at the NLWE training started on February 22, 2013 at the rate of 2 days per week. The first two modules were conducted in February 2013, while the third and fourth modules were conducted on 1, 2, 8, and 9 March 2013. Sessions were interrupted due to the prevailing security events at Tripoli. The remaining two modules were completed in April 2013.

The training modules are the following:

- Introduction to public financial management and budget preparation
- Budget execution
- Public accounting and financial reporting
- General accounting and financial analysis
- Public procurement
- Taxation and financial reports

In May, the training provider prepared the trainees' participation and performance assessment. The certificate award ceremony was conducted on June 12, 2013, in presence of the NLWE DG and senior staff, the LWWSS COP, and the Al-Dar TAGO trainers.



Distribution of certificates in presence of: Left to Right: The LWWSS COP, TAGO, and the NLWE DG

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	2 (FY1		Y-3 (FY12)					Y-4 (FY13)																				
		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4											
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing																												
	Activity introduced*																												
	Staff interviews, training needs assessment																												
	Training in Public Accounting, Finance, Procurement, Auditing**																												
	Define cost centers, create/update chart of accounts, and procedures																												
	Develop RFP and procedures for asset and inventory identification and valuation																												
	* Year-Three Work Plan																												
	** As reported in the Year Four Work Plan																												

Legend

- Time frame as planned
- Delays indicated in Year Four Workplan
- Delays detailed in Q2 report

3.1.6 - Develop procedures and a standard manual for internal audit within the WE, and conduct applied training to key departments

As per the year four work plan, LWWSS will assist NLWE in developing a thorough Internal Audit Manual that will cover all aspects of audit controls dictated by the by-laws and the legislation applicable to the WEs, in order to improve detection, corrective and preventative controls within the WE. The effort would also allow the WE to conduct an operational review of performance on a yearly basis, thereby providing the WE management with powerful tools to monitor the WE’s performance and compliance.

During the third quarter, the LWWSS' program Finance Specialist Mike Chalah and the LWWSS' program subcontractor ABA continued their work on the internal audit manual which will be composed of several sections, including the following:

1. Introduction and Departmental level mission statement
2. Internal Audit Agreement
3. Ethics
4. Team Training
5. Financial Management and Internal Controls
6. Strategy and Planning
7. Methodology
8. Quality Control
9. Policies and Procedures

The first draft of the manual was completed during the second quarter of year four. In April, the draft manual was sent to the NLWE financial director for his review and comments. In May, ABA and the LWWSS financial specialist met with the NLWE DG to discuss the manual. The manual sections were revised in June by ABA and the LWWSS financial specialist based on the NLWE's DG and financial director's comments. The training is planned for August 2013.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-3 (FY'12)					Y-4 (FY'13)												
		Q3			Q4		Q1		Q2		Q3		Q4						
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
3.1.6	Develop procedures and a standard manual for internal audit																		
	Activity introduced																		
	Review NLWE requirements and define key best practices																		
	Draft audit manual, review and issue to NLWE																		
	Conduct training, incorporate any revisions, and issue final copy																		

Legend

 Time frame as per Year Four Work Plan

Component 4: Capital Investment Planning and Program/Project Management

There are no component four activities with the NLWE in the year-four work plan.

Component 5: Procurement of Technical Equipment to Strengthen WEs

Work Plan Activities

Item	Activity Description	Program Resource	Deliverable by End of Year Four	Target Date
5.2	Upgrading Pumping and Energy Efficiency			
5.2.3	Test and design the replacement nine submersible pumps and associated works	- CDM (BG, GT) - Local subcontractor (TBD)	Tests completed and design produced	June, 2013
5.2.4	Supply and install the replacement nine submersible pumps and associated works	- CDM (BG, GT, EH) - Local subcontractor (TBD)	Procurement stage; contract placed	September, 2013

5.3	Increasing Supply Hours to Areas Facing Supply Shortage			
5.3.1	Supply and install up to 9 back-up generators for key NLWE stations	- CDM (BG, GT) - Local subcontractor (ELARD)	- Manufacturing and shipping done; - Installation substantially complete	September, 2013
5.3.2	Establish service agreements and conduct user training program for these generators	- CDM (BG, GT), DAI (MK) - Local subcontractor (ELARD)	- Activity commenced	September, 2013

BG-Bassem Ghayda; GT-Gulnard Ters; MK-May Koleilat

Activity 5.2 - Upgrading Pumping and Energy Efficiency

As per the year four work plan, the LWSS program will be installing nine pumps in the following stations:

- a- Department of Tripoli:
 - Abou Halqa spring Pumping Station (one pump)
 - Manar tank Pumping Station (one pump)
- b- Department of Qobayyat:
 - Kfartoun Pumping Station (one pump)
- c- Department of Batroun:
 - Kfarhelda - Der Bella Pumping station (one pump)
 - Kfarhelda - Mar Yaacoub Pumping Station (one pump)
- d- Department of Halba:
 - Al Ouyoun Pumping Station (four pumps)

Throughout the third quarter, drawdown and constant flow tests were implemented for the four Al Ouyoun wells. Based on the completion of the wells assessment, the subcontractor will be submitting the final report including all well assessments results.

It is to be noted that the well assessment phase has suffered some delays due to a number of factors including:

- The delay in the identification of a bidder;
- The delay in the commencement of well assessments;
- The change in PO on May 8, 2013, to include additional pump and aquifer tests, with an extension period of 3 weeks.
- Delays in well test, reported by the subcontractor ELARD, due to restricted access to sites.

Activity 5.3 - Increasing Supply Hours to Areas Facing Supply Shortage

During the third quarter, the CDM Smith engineers continued their site inspection visits at the pump stations that will receive back-up generators:

- Hab – Dep. Of Tripoli
- Aayrouniyeh – Dep. Of Tripoli
- Nakhle – Dep. Of Koura
- Bqerqacha – Dep. Of Koura
- Beshmezzin – Dep. Of Koura
- Qobayyat – Dep. Of Qobayyat
- Kfartoun – Dep. Of Qobayyat
- Rahbeh – Dep. Of Halba

The Edan Group shipment of fuel tanks and accessories arrived in early April 2013 from USA. The NLWE DG requested a special permit from the Directorate General of Customs in order for the subcontractor to clear the goods without payment of customs duties. The shipment of cables also arrived in mid-April from Turkey and was cleared accordingly.

The shipment of the three Generators from France arrived at the Beirut Port, were cleared from customs, and transferred to the Subcontractor warehouse on June 9, 2013. As reported in previous reports, these are the discontinued models by the vendor, which are now built in the vendor's plant in France.

Conversely, it is expected that the three USA generators (including the eight Automatic Transfer Switches (ATS) will arrive at Port of Beirut by mid-July 2013. The shipment was delayed by 3 weeks due to the logistics of transferring the shipment of material to the name of NLWE as consignee and care of DAI, which required using a third party shipper.

In the meantime, excavation and other preparatory work were on-going at the sites in preparation of the generators installation. In April, civil works for gensets concrete pads have been completed at the Rahbeh, Qobayyat, and Kfartoun pump stations. In May, works were completed at the Hab and Airouniyeh pump stations, and have started at Nakhle pump station. In June, works were completed at the Beshmezzin pump station, and continued at the Nakhle pump station. It is to be noted that some restrictions in accessing the work sites due to the security situation in the North of Lebanon were reported by EDAN group. However, these restrictions did not cause significant delay to the general activity timeline since they consisted of a few days.

On the other hand, and in regard to the installation of generators, the Rahbeh, Kfartoun and Ayrounieh generators were delivered to site. However, the CDM Smith engineers could not inspect the Kfartoun site due to the security situation.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-2 (FY'11)				Y-3 (FY'12)				Y-4 (FY'13)				Y-5 (FY'14)				Y-6										
		Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4								
		M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A			
5.3	Increasing Supply Hours to Areas Facing Supply Shortage																											
	Activity introduced*																											
	Survey and data gathering*																											
	Bidding documents and specifications*																											
	Procurement*																											
	Activity rescheduled based on findings regarding NLWE's data quality**																											
	Complete assessment and design for generators**																											
	Confirm costing and start procurement process**																											
	Place procurement orders for manufacturing and installation**																											
	Implementation: supply/installation of generators and training operators**																											
	Servicing and warranties																											
	* As planned in Year-Two Work Plan Amendment #3 dated June 24th, 2011																											
	** As planned in Year-Three Work Plan and continuing in the Year-Four Work Plan																											

Legend

-  Time frame as planned
-  Delays, as indicated in Year Four Workplan

Component 6: Small- to Medium-Scale Infrastructure Work

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
6.2	Expanding Service Provision to Non-Served Areas			
6.2.1	Beit Mellat, Akkar, North Lebanon: Design metered house connections to up to 12 villages	LWWSS (WA) Local Engineering Firm (Kredo)	- Design completed	October, 2013
6.2.2	Beit Mellat, Akkar, North Lebanon: Implement house connections to up to 12 villages	Local Engineering Firm (Kredo) Local subcontractor (TBD)	- Procurement completed; Subcontractor appointed	January, 2014

WA- Walid AbouZeid-Infrastructure PM

Activity 6.2 - Decreasing Water Losses and Upgrading Existing Networks

The assessment and design of the Bebnine network started early March 2013 and is ongoing. In this regard, Kredo collected data and previous surveys conducted on the existing water network.

According to the contract, Kredo's assessment report should have been submitted to DAI no later than two months after signature of the contract, on April 18. However, due to the unstable security situation in Tripoli and Akkar, the consultant was prevented from carrying out this task in a timely fashion. Consequently, the Draft Preliminary Design Report for Bebnine was submitted to DAI on May 31, while the Draft Field Investigation Report was submitted on June 17. Both reports have been reviewed and commented by LWWSS's engineering team. The said comments were discussed with Kredo in a meeting held in DAI's office in late June. At the end of the meeting, it was agreed that Kredo will review and complete as soon as possible the two reports mentioned above taking into account the comments raised by the LWWSS team.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-2 (FY11)				Y-3 (FY12)				Y-4 (FY13)				Y-5 (FY14)				Y-6										
		Q3		Q4		Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4								
		M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A			
6.2	Expanding Service Provision to Non-Served Areas: Beit Mellat																											
	Activity introduced*																											
	Hiring personnel, technical investigation of project parameters																											
	SOW, procurement and appointment of engineering subcontractor**																											
	Starting design and preparation for procurement of the works**																											
	Detailed design period and bid preparation period																											
	Procurement and appointment of infrastructure works contractor																											
	Site implementation period																											
	* Year-Three Work Plan																											
	** Delayed by Three Months as per the Year-Four Work Plan																											

Legend

- Time frame as planned
- Delays indicated in Year Four Workplan
- Delays detailed in Q2 report

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
7.3	Develop Tools and Support WEs in Adopting Corporate Communication			
7.3.2	Design and Implement WE Corporate Website	LWWSS (NB), Local subcontractor (Byblos Printing)	- Activity completed	July, 2013
7.6	Consumer-Targeted Awareness Programs			
7.6.3	Outreach material promoting public awareness and education on water conservation	- LWWSS (NB) - Local subcontractor (Netways)	- Activity completed	March, 2013

NB- Nathalie Bavitch

Activity 7.3 –Designing and Implementing WE Corporate Website

The corporate website for the North Lebanon Water Establishment will be browsed and used by the public citizens of North Lebanon, particularly those who are connected to the water network. The website will be in 3 languages: Arabic, French and English with the Arabic site being the default site. The website will include the technology of a dynamic content management system allowing the NLWE non-technical staff to easily and cost effectively update content and modify page layouts after the initial launch.

The subcontract to design, develop, and host the NLWE's corporate website was signed at the end of November 2012, and Netways began work in December 2012. As reported previously, there was a delay with the website design approval phase because the NLWE team was not satisfied by the initial design options proposed by Netways.

In Mid-April, Netways shared the beta version of the English website with LWWSS and NLWE. The beta version was shared with NLWE and the LWWSS program' Communications and M&E Specialist held several meetings with NLWE with the purpose of getting their input and finalizing both the beta version and English content of the website. The comments were shared with Netways staff and were tested. Subsequently, the English content was translated to Arabic and French, and uploaded on the website beta version after having been finalized in close coordination and feedback from the NLWE Head of Communication Department.

After having finalized the 3 versions, the Communications and M&E Specialist coordinated with Netways for the deployment and testing of the website. The following tests have been completed:

- Functionality
- Performance
- Server Response Code
- Stress Test
- Load Time Analysis
- Size Analysis
- Request Analysis
- Page Speed Performance

Furthermore, a training of the NLWE IT and Communications Departments was conducted on June 20, 2013. The training aimed to provide a step-by-step user guide to five NLWE personnel of the Content Management System (CMS), which will enable them to manage the website content.



CSM training for NLWE IT and Communications Department

One of the main challenges of this activity remains the delay in getting NLWE feedback and sign off on website documents. In July, the LWSS program will share the final website version with NLWE and send a letter requesting official sign off and approval to publish the website online.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-3 (FY12)				Y-4 (FY13)											
		Q3		Q4		Q1		Q2		Q3		Q4					
		M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
7.3	Designing and Implementing WE Corporate Website																
	Activity introduced*																
	Website design and implementation**																
	Prepare for website activity launch																
	Appoint website design supplier																
	Implement website and go live																
	* Year-Two Work Plan																
	** Activity rescheduled as per Year-Three Work Plan																

Legend
 Time frame as planned
 Delays detailed in Q3 report

Activity 7.6 - Outreach material promoting public awareness and education on water conservation

This activity was completed in March 2013.

4. South Lebanon Water Establishment (SLWE)

Component 2: Capacity Building for Managerial, Technical and Operational Efficiency

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
2.1	Establishing and Building the Capacity of Metering Teams			
2.1.1	Assist in identifying metering teams and assess training needs	- CDM (BG, GT, IN) - DAI (MK) - ValuAdd	- Activity conducted	September, 2013
2.1.2	Provide management team and field team training on metering	- CDM (BG, GT, IN) - DAI (MK)	- Activity conducted	September, 2013
2.1.3	Provide technical assistance (studies, training, study tours) and/or technological tools for water demand management	- DAI (TBD) - ValuAdd	- Activity conducted	September, 2013
2.3	Build Pump Stations Operators Capacity in Operation and Maintenance			
2.3.1	Pump station operators basic O&M and H&S training	- DAI (MK) - Kredo	- Activity conducted	September, 2013

BG-Bassem Ghayda; GT-Gulnard Ters; IN – Ihab Nasr; MK-May Koleilat

Activity 2.1 – Establishing and Building the Capacity of Metering Teams

As per the year four work plan, the source metering installation activity will include training on water meter operation and maintenance for the pump station personnel to maximize the impact of this activity. This activity will commence when field progress has been achieved on the source metering procurement activity (activity 5.1). This sequencing is necessary given that this activity is a follow-up to activity 5.1. Establishing and training metering teams is closely associated with the ongoing meter installation given that, in order to draft a metering strategy, assign teams and provide training, everything must link to the actual metering infrastructure that awaits installation.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	Y-2 (FY11)				Y-3 (FY12)				Y-4 (FY13)									
		Q3		Q4		Q1		Q2		Q3		Q4							
		A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
2.1	Establishing and Building the Capacity of Metering Teams																		
	Activity introduced																		
	Assist in identifying metering teams and assess training needs																		
	Provide management and field team with training on metering																		
	Propose provision of tools for demand management																		

Legend

 Time frame as per Year Four Work Plan

Activity 2.3 – Capacity Building in Operation and Maintenance of Pump Stations

As per the year four workplan, a capacity building of pump station operators in the areas of operation, maintenance, health and safety is planned. The proposed training course is already prepared in a template format by the LWWSS engineering training team. It is ready for customization to meet the need of SLWE. It consists of three to five days of in-class and on-site training, covering all the basic aspects of operating and maintaining a pump station, including:

- Operating the mechanical and electrical equipment;
- Cleaning and maintaining the equipment;
- Electrical, hydraulic and chemical health and safety procedures;
- Facility management basics;
- Chlorinator reading and operating basics;
- First aid.

In April, Kredo’s contractual budget increase was approved, which allowed for the training preparations to start. Subsequently, a kick off meeting was held on April 12 at the DAI office between Kredo and the LWWSS team. In the meeting, the training program including agendas and logistics were discussed. Subsequently, a letter was sent to SLWE DG on May 28 confirming initial training dates (between August and September 2013).

On June 17, a letter was received from the SLWE DG confirming the names of 51 trainees. The LWWSS Capacity Building Specialist and Kredo will be conducting preparatory meetings with the SLWE DG in order to prepare for the training which will take place in mid-August 2013.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	(FY Y-4 (FY'13)														
		Q4			Q1			Q2			Q3			Q4		
		A	S	O	N	D	J	F	M	A	M	J	J	A	S	
2.3	Capacity Building in O&M of Pump Stations															
	Activity introduced*															
	Staff interviews															
	Course preparation															
	Conduct training															
	Evaluation and follow-up															
	* Year-Four Workplan															

Legend

- Time frame as planned
- Delays detailed in Q2 report

Component 3: Increase Financial and Commercial Viability of Water Establishments

Work Plan Activities

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
3.1	Upgrade Finance and Accounting Standards and Methods			

3.1.1	Build the WE capacity in consolidating and issuing end of year reports	EMC (MC), ABA	- Activity completed	May, 2014
3.1.2	Training in Public Accounting, Finance, Procurement, Auditing as needed	EMC (MC), ABA	- Activity completed	February, 2015
3.1.3	Define cost centers, update chart of accounts, and accounting coding procedures	EMC (MC), ABA	- Activity completed	December, 2013
3.1.4	Update procedures for asset and inventory identification, coding and valuation	EMC (MC), ABA	- Activity completed	December, 2013
3.1.5	Develop procedures and a standard manual for yearly budgeting within the WE, and conduct applied training to key departments.	EMC (MC), ABA	- Activity completed	February, 2015
3.2	Integrate the WEs Financial, Accounting, Customer Service and Business Process Systems			
3.2.1	Conduct business process mapping	EMC (MC), ABA, TBD	- Activity completed	December, 2013
3.2.2	Implement software platform including Finance and Accounting System and Customer Relationship Management solution	EMC (MC), ABA, TBD	- Activity completed	March, 2014
3.2.3	Implement intranet system enabling web-browser based e-training, communication and business process tools	EMC (MC), ABA, TBD	- Activity completed	March, 2014
3.2.4	Conduct training, assist in transition phase and provide one/two year on-site support	EMC (MC), ABA, TBD	- Activity completed	February, 2015

MC-Mike Chalah

Activity 3.2 - Integrating the WE's Financial, Accounting, Customer Service and Business Process Systems: The Enterprise Resource Planning (ERP) Platform

Based on the SLWE DG request of LWWSS assistance in implementing an ERP for the WE, the LWWSS team prepared cost estimates for the activity in May. A memo was sent to COR with cost estimates and a recommendation to include the ERP system in the year-four work plan.

Based on the COR approval in June, the implementation of the ERP system at the SLWE was included in the amended year-four work plan. Upon approval of the budget re-alignment, the activity will be initiated.

The implementation of this activity will be done through a local subcontractor implementing a comprehensive Microsoft solution (Navision, CRM, Sharepoint). The system will be operational and training completed by March 2014, with ongoing training, transition, financial reports production and support expected to last through February 2015.

This activity includes the following software modules that are central to water utility operation and management:

- Accounting (Chart of Accounts - General Ledger - Cost Centers - Dimensions - Cost Management - Receivables - Payables - Banks - Fixed Assets)

installation at the SLWE, it was decided that a training in GIS application for personnel from the 7 SLWE branches is needed to ensure sustainability of the data and keep it up to date.

This training aims to build the capacity of engineers and pumping station operators at the seven SLWE branches in the use of the newly installed GIS system. Its main objectives are to organize and integrate the data collected from the SLWE pumping stations into GIS, as well as to use customized tools to manage and maintain these data in a systematic and user-friendly interface.

A preliminary meeting took place at the SLWE on April 10, aiming to plan for the activity and the involvement of the senior head of related departments in the training. Consequently, an introductory session was first carried out on April 17 to the Heads of Branches, with the purpose of explaining the objectives and advantages of the GIS application. This was followed by an on-the-job training session targeting the personnel at the Saida branch. The session covered the following sub-topics:

1. Geo-database Organization;
2. Layers and System Tables;
3. Implemented Tools;
4. Custom queries;
5. Importing and exporting CAD Data;
6. Generating reports and Backing up the system.

Following the first session conducted at the Saida branch, the consultant Mr. Wassim Katerji, the SLWE IT, Projects and Studies team, in cooperation with the LWWSS Capacity Building Specialist started the installation of the GIS application at the SLWE branches. The application was installed and training was conducted at five of the seven branches: Saida, Tyr, Nabatieh, Jezzine, and Zahrani.

In June, the SLWE Engineer Mr Ramzi Ramadan requested additional features to be amended in the GIS application. Since the features are not within the initial scope of work, the LWWSS team is assessing the request with the IT specialist to decide accordingly.

Training sessions for the remaining branches (Marjayoun, Hasbaya, and Bent Jbeil) will continue after the GIS application amendment will be finalized.

Timeline

Work Plan Item	Wok Plan Activity Title; Activity Stages	3 (FY1)		Y-4 (FY13)											
		Q4		Q1		Q2		Q3		Q4					
		J	A	S	O	N	D	J	F	M	A	M	J	J	A
4.2	Implementing Asset Inventory and Valuation														
	Activity introduced*														
	Data migration from Access to arcGIS														
	Tools development and deployment in main branch														
	Deployment and training for pump station managers/ operators in the 7 branches														
	Go-live and post-installation support														
	* Year-Three Work Plan														

Legend

-  Time frame as planned
-  Delays detailed in Q2 report
-  Delays detailed in Q3 report

Component 5: Procurement of Technical Equipment to Strengthen WEs

Work Plan Activities

Item	Activity Description	Program Resource	Deliverable by End of Year Four	Target Date
5.1	Identifying Water Production and Contributing to Water Demand Management			
5.1.1	Supply and install up to 218 production meters, fittings and protection box/manhole (all non-metered sources in WE)	- CDM (BG, GT) - Modon Group	- Activity substantially complete	September, 2013
5.1.2	Establish service agreements, conduct training and complete meter reading	- CDM (BG, GT) - Modon Group	- Activity started	September, 2013
5.4	Upgrading Water Analysis Laboratories			
5.4.3	Supply the lab with consumables	- DAI (EH), Numelab, Multilab	- Activity completed	April, 2013
5.4.4	Conduct user training program on the atomic absorption instrument	- DAI (MK)	- Activity completed	September, 2013
5.6	Increase IT Infrastructure Efficiency			
5.6.2	Upgrade server installation and power supply infrastructure at head office and selected branches	-Local subcontractor (EDM)	- Activity completed	September, 2013

BG-Bassem Ghayda; GT-Gulnard Ters; IN – Ihab Nasr

Activity 5.1 - Identifying Water Production

The source metering work continued on track throughout the third quarter. In April, the installation of the Solar Ultrasonic flow meters started in the pilot area. Modon continued civil site works and protective concrete manhole construction at several of the pump stations in preparation of the installation of flow meters. The LWWSS program engineers continuing their site inspections at sites where manholes and rectification works are being done.

On the other hand, the mechanical flow meters were shipped from the USA and all shipment documentation was received by DAI by the third week of April. The mechanical flow meters arrived to the port of Beirut on May 15, 2013, and the DG of SLWE provided the special permit to the General Directorate of Customs duties at Port of Beirut for the clearance of the goods. On June 6, the subcontractor Modon received all mechanical flowmeters in their warehouse. The CDM Smith engineers visited the subcontractor to inspect and approve the received mechanical flow meters and related fittings and components. On June 17, the flowmeters and related fittings and components were delivered to SLWE. Installation of the flowmeters started on June 21 at the Bent Jbeil and Tyre departments.



Manhole and its cover



Wellhead components and fittings



CDM Smith Engineers inspecting equipment installation

The activity continues post-installation and includes a year-long meter reading service by the supplier, in addition to warranty and service of supplied equipment. A follow-up for this activity continues under activity 2.1, above. It is estimated that task 5.1.2 of this activity (maintenance, warranty, and meter reading for a period of one year per completed site) will extend into until April 2014 at the latest.

Component 6: Small- to Medium-Scale Infrastructure Work

Work Plan Activities

Item	Activity Description	Program Resource	Deliverable by End of Year Four	Target Date
6.3	Pump Station Infrastructure Rehabilitation			
6.3.1	SLWE: Test and design pumps, motors and associated works for the rehabilitation of selected stations	- CDM (and their subcontractor DEP)	- Activity completed	February 2013
6.3.2	SLWE: Supply and install pumps, motors and associated works for the rehabilitation of selected stations	- CDM (and their subcontractor DEP) - Local subcontractor (TBD)	- Infrastructure contract placed; works commenced	December, 2014

Activity 6.3 – Upgrading Pumping and Energy Efficiency

The procurement for the Rehabilitation of Ouadi Jilo and Batoulay pump station in SLWE relates to the supply and installation of 13 new horizontal multistage pumps (7 in Ouadi Jilo and 6 in Batoulay), the supply and installation of 6 new vertical multistage submersible well pump sets (3 in Ouadi Jilo and 3 in Batoulay), as well as the complete overhaul of 3 multistage horizontal pumps in Ouadi Jilo with all inherent ancillary works and accessories.

The consultant CDM Smith in collaboration with the consultant DEP prepared the design drawings and the Technical Specifications necessary for the execution of the project based on which an RFP was prepared and launched by DAI on February 18, 2013 using an open bidding process. Out of the eighteen bidders who collected the RFP nine submitted their offers by the set deadline of April 2, 2013.

The Evaluation Committee reviewed the Technical Proposals of those bidders including the past experience, CVs of personnel, financial standing, methodologies, and other criteria. Technical Proposals were evaluated according to the criteria stipulated in the RFP based on meeting or exceeding certain acceptability requirements. As a result of the evaluation conducted on April 22, it was concluded that only five bidders have submitted a technically compliant offer. These were: Al Rawan Co. sarl, ARISON sarl, SETCO Engineering, Edan Group International and Modon Group sarl. Regarding the Financial Offers, the lowest bid price came from Al Rawan Co. sarl.

The contractor “Al Rawan Co. sarl” was recommended by the evaluation committee as the winning contractor to execute the rehabilitation of Ouadi Jilo and Batoulay pumping stations for the South Lebanon Water Establishment (SLWE). “Al Rawan Co. sarl”’s proposal met all technical requirements as specified in the RFP with the most economical bid. DAI's selection of “Al Rawan Co. sarl” follows standard evaluation criteria scoring methods, which includes company profile, capacity, skill and resources. “Al Rawan Co. sarl” was also determined to have a documented history of executing pump stations rehabilitation projects similar to the SLWE activities undertaken by LWWSS. The appointment of “Al Rawan Co. sarl” is also within the budget allocated for the SLWE infrastructure activities.

The request for consent to subcontract with Al-Rawan was sent to the CO by end of April 2013. A revised consent was sent by end of May including an explanation on the defects liability period which extends beyond the end of the DAI Task Order. The consent to subcontract with Al Rawan was approved by the CO on June 28, 2013. Accordingly, the subcontract agreement was prepared and

finalized by end of June 2013. A kick off meeting will be scheduled during the first week of July in the presence of the consultant CDM Smith.

Component 7: Corporate Culture, Customer Service Orientation, and Public Outreach

Work Plan Activity

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
7.6	Consumer-Targeted Awareness Programs			
7.6.3	Outreach material promoting public awareness and education on water conservation	- LWWSS (NB) - Local subcontractor (Byblos Printing)	- Activity completed	March, 2013

NB- Nathalie Bavitch

Activity 7.6 - Outreach material promoting public awareness and education on water conservation

This activity was completed in March 2013.

5. Study Tours and Conferences

Item	Activity Description	Program Resource	Outcome by End of Year Four	Target Date
4.3	Build Decision-Makers' Managerial Capacity in Water Utility Management			
4.3.1	Water utility management: conferences, workshops, specialist training and study tours	LWWSS (MK)	- Activities planned and undertaken	September, 2013

MK – May Koleilat

As part of the Year Four Workplan and the Annual Training Plan to build decision-makers' managerial capacity in water utility management (Activity 4.3.1: Water utility management: conferences, workshops, specialist training and study tours), the LWWSS program started exploring the possibility for a study tour with Morocco's *Office National de l'Electricité et de l'Eau Potable* (ONEE).

In the third quarter, based on the approval of the study tour program by the COR, the LWWSS program proceeded with the preparation of a Training Implementation Plan (TIP) and other required documentation. The TIP and budget were approved by the COR on April 25.

Fourteen senior staff including general directors and heads of departments from the four Lebanese Water Establishments in the North, South, Bekaa, and Beirut-Mount Lebanon participated in the study tour with Morocco's *Office National de l'Electricité et de l'Eau Potable* (ONEE).

The study tour entitled "Water Services Management in Urban Areas" aimed to familiarize senior staff from the four water establishments with the operation of the water sector in Morocco in general, with specific course and practical work in water management, water distribution, network maintenance, water quality control, metering systems, tariffs systems, and research activities.

The study tour took place between 20 and 23 May, 2013, and was attended by the General Directors of both the Bekaa and the Beirut-Mount Lebanon Water Establishments, in addition to heads of Project and Studies, Finance, Tariff and metering, Pump Stations, Operations and Maintenance, and Water Treatment departments.

The participants had the chance to visit the different water service departments of the Moroccan authorities, including the Benslimane City Water Distribution Network, the ONEP Pump Station, the Mobile Leak Detection Unit, the Wastewater Mobile Lab, the water plant of BouRegreg Complex, and the Water Quality Control Central Lab.



Study tour opening session



Visit to water quality control central lab



Overview of leak detection equipment



Visit to Water Plant of BouREgreg Complex



Visit to International Water Forum in Casablanca city

D. COLLABORATION WITH DONORS AND GOL OFFICIALS

Donor coordination is an essential part of LWWSS project planning and execution in order to (1) avoid unnecessary duplication, (2) identify specific areas of coordination and (3) identify areas where LWWSS can collaborate with other donors on specific projects or programs. The list of meetings and special events with the GOL and other donors below provides a clear picture of this important program activity.

Meeting with Donor, GOL Official, or Special Event	Date	Attendees	Brief Synopsis of Meeting
USAID	April 5, 2013	Sam Coxson, Jim Boomgard, Mike Jacobowski, Sana Saliba, Charbel Hanna	Courtesy visit
USAID	April 9, 2013	Sam Coxson, Rana Maalouf, Sana Saliba, Charbel Hanna	Discussion of audit findings and budget realignment
USAID	April 29, 2013	Sam Coxson, Ejonta Pashaj, Rana Maalouf, Nathalie Bavitch, Sana Saliba, Charbel Hanna	Courtesy visit, other issues such as audit findings, PMP, and budget
EU Water Donors Meeting	May 8, 2013	Rana Maalouf	Periodic coordination meeting and presentation of new water projects;

			networking opportunity for coordination and collaboration between water and wastewater projects
GIZ Close-Out Interview	May 8, 2013	Sam Coxson	GIZ conducts a project closeout interview with other donor agencies and programs (e.g., LWWSS)
Harve de Bailleux, COP Baladi Plus and PACE Programs	May 29, 2013	Sam Coxson	Discussion of both programs and sharing of possible financial training sources
USAID General Meeting	June 6, 2013	All COPs	Periodic update of USAID personnel and policies
Social Impact--Harvey Herr	June 10, 2013	Sam Coxson, Rana Maalouf, Nathalie Bavitch	Review of needed changes to the PMP definitions based on audit comments
GIZ program evaluators	June 17, 2013	Bassam Jaber, May Koleilat, Bassem Ghayda, Mike Chalah, Rana Maalouf, Klaus-Peter Jacoby, Katja Schmitt	Evaluation of the GIZ program
Workshop	June 19, 2013	GIZ team, USAID, Bassam Jaber, Rana Maalouf, Stakeholders, Donors	Results of evaluation presented and discussed in a joint workshop with project partners
Workshop	June 21, 2013	Nathalie Bavitch, Rana Maalouf	USAID Gender Workshop

E. CONTRACT DELIVERABLES

- The March April May monthly report and second quarter report were submitted to the COR in April 2013.
- The draft second quarter report for year four was submitted in April.
- The revised workplan was approved by COR in June, 2013.

F. CHALLENGES, PROBLEMS, ISSUES

Resolved Challenge: Operation and Maintenance of the Chlorination Systems in the BWE

Following on the update included in the last quarterly report relating to the supply of consumables, as well as the operation and maintenance of the Chlorination Systems by BWE, during the month of November, 2012, the LWWSS team succeeded in assisting the WE in drafting a scope of work for the O&M services and the supply of consumable for these chlorinators. The BWE launched the procurement process which will secure the continuous use and sustainability of this equipment. However, there is still no outsourcing of this activity. The LWWSS team will continue to provide support to assist the WE in continuing to make use of this equipment where needed.

Lack of WE staff availability

The lack in availability of staff remains a challenge within most WEs. Across all the program's components, the LWWSS program is focusing on assisting the WEs with appropriate employee placement and establishing training programs. Training and proper placement are especially applicable for procurement activities. For example, during year-three, LWWSS assisted SLWE in allocating adequate roles and responsibilities of staff within the Saida water analysis laboratory in the South Lebanon Water Establishment (SLWE) and provided these staff with specialist training, to enable optimal resources being dedicated to the atomic absorption meter provided under the program.

Enterprise Resource Planning (ERP) Risks in BMLWE

Although BMLWE expressed their commitment and interest to complete this project, in May, the risk of lack of cooperation and usage of the system by some BMLWE staff remained, despite the Director General's seeming willingness to enforce it on staff.

By the end of May, the billing and collection module was still not active as not enough cooperation was received from the IT personnel. Mr. Joseph Nseir, the Director General, had specified a deadline (May 31, 2013) for completing pending ERP activities and made it clear that no work will be done after May, even though the proposed workplan by LWWSS and EDM team required more time.

The LWWSS program sent the Director General a letter beginning June requesting sign-off and/or comments on all ERP modules, and reminding him of his commitment to maintain and support the system and its users beyond May. No official response was received from Mr. Nseir by end June. It is expected that Mr. Nseir's response will shed light on his intentions towards this activity, including sign-off, based on which the next steps will be decided with USAID.

The risk remains the sustainability of the system. At the start of this activity, BMLWE committed to contract a support and maintenance company for the system. DAI was informed in June that the BMLWE identified a company to take over support and maintenance of the ERP and that a meeting will be called, once that contractor has assessed what is needed from DAI/EDM to carry on its work.

Access to work sites based on security situation

Another challenge is the security situation in many areas of the country including the North Governorate, Saida, and the Bekaa, which is restricting the movement and on-site work in some activities. However, so far the activities will still be completed by their respective general timelines, as foreseen in the latest revised and approved workplan.

G. STTA DURING QUARTER

During this quarter there were no STTAs.

H. MAJOR ACTIVITIES PLANNED FOR NEXT QUARTER

BWE Water Establishment Activities

- 2.3 Completion of O&M pump station trainings.
- 2.4 Continuing the preparation of the public administration and process management training.
- 2.5 Continuing with Network Maintenance and Repair training preparations.
- 3.2 Continuation of ERP implementation pending the approval of the increase of EDM's contract ceiling.
- 4.4 Master plan inception report completed and vetted with the BWE Director General and continued work on the master plan.
- 5.4 Inspection of Lab equipment and continuation of rehabilitation of Zahle laboratory.
- 6.1 Continuation of site works of Zahle network rehabilitation.

Beirut-Mt. Lebanon Water Establishment

- 3.1 Completion of BMLWE procedures and standards manual for use in budgeting and financial reporting, and training implementation.
- 3.2 BMLWE response on the ERP system support, and sign off.
- 5.2 Jeita Pump Station implementation and O&M training implementation for Jeita pump station operators.

North Lebanon Water Establishment

- 3.1.6 Continuation of work on the Internal Audit Manual and conducting corresponding training.
- 5.2 Continuation of design work on pump station rehabilitation.
- 5.3 Continuation of site preparation work and generator installation.

6.2 Design and supervision of the rehabilitation of water supply network in Bebnine.

7.3 Obtaining WE sign off to launch corporate website online.

South Lebanon Water Establishment

2.3 Preparation and implementation of O&M pump station trainings.

3.2 Procurement of subcontractor for ERP activity.

4.2 Continuation of Training in GIS application in two branches.

5.1 Continuation of source metering work by subcontractor Modon and installation of meters.

5.4 Continuation of SLWE water analysis tests.

6.3 Commencement of works for pump station rehabilitation.

I. ENVIRONMENTAL COMPLIANCE REPORTING

The LWWSS Project Environmental Mitigation and Monitoring Plan (EMMP) details the project environmental compliance requirements, as well as including a list of reports for submission to USAID. The primary environmental compliance reporting tool is the Quarterly Report.

The LWWSS EMMP notes that an initial screening form must be completed for each project activity. If the activity is determined to be in category 2, 3, or 4, then an environmental review and assessment checklist (ERAC) and an environmental mitigation and monitoring plan (EMMP) must be completed and approved by the LWWSS COTR.

Initial screening forms were completed for each activity (available in the files of the LWWSS Environmental Specialist), and it was determined that the activities under components 5 and 6 all require ERACs and EMMP. The first table below entitled “LWWSS Environmental Compliance Overview” summarizes the environmental compliance actions for each LWWSS activity. The second table below entitled “LWWSS Environmental Mitigation and Monitoring Actions” details environmental mitigation and monitoring actions for each activity that requires an ERAC and EMMP.

Environmental Compliance Table 1:

LWWSS Environmental Compliance Overview				
Activities (Completed, On-going, and Planned)		Environmental Compliance Actions		
#	Activity Description	Has an initial screening form been completed?	As per the screening form, is an ERAC and EMMP necessary?	Is there an approved ERAC and EMMP (if applicable)?
Component 2				
2.1	Source metering training in SLWE	Yes, see activity 5.1	See activity 5.1	See activity 5.1
2.2	Water quality management in the Bekaa implemented by AUB	Yes	No	N/A
2.3	O&M trainings for pump station operators in BWE, NLWE, and SLWE	Yes	No	N/A
2.4	IT literacy training for BMLWE and BWE	Yes, see activity 3.1	No	N/A

2.5	Network maintenance and repair training for BWE	Yes	No	N/A
Component 3				
3.1	Upgrade finance and accounting standards and methods	Yes	No	N/A
3.2	Enterprise Resource Planning (ERP) platform and associated activities	Yes	No	N/A
3.3	Pilot Stakeholder exercise to sustain O&M of USAID WWTP	Yes	No	N/A
Component 4				
4.1	Business planning for BMLWE and SLWE	Yes	No	N/A
4.2	Pump station inventory in South Lebanon	Yes	No	N/A
4.3	Water utility management: conferences, workshops, specialist trainings and study tours	Yes	No	N/A
4.4	Masterplanning for the Bekaa	Yes	No	N/A
Component 5				
5.1	Source metering installation and training	Yes	Yes	Yes
5.2.1-5.2.2	Jeita pump station rehabilitation	Yes	Yes	Yes
5.2.3-5.2.4	Pump station rehabilitation in North Lebanon	Yes	Yes	No - in Q4 of Y4*
5.3	Back-up power generators for NLWE pump stations	Yes	Yes	Yes
5.4	Upgrading water analysis laboratories in SLWE and BWE (Y3) and rehabilitation of laboratory and equipment purchases for BWE (Y4)	Yes	Yes	-Yes for Y3 activities -Yes for Y4 activities
5.5	Customer Service Center in BWE	Yes	Yes	Yes
5.6	Upgrade IT equipment in BWE and SLWE	Yes	Yes	-Yes for BWE -Yes for SLWE
5.7	GNSS procurement and training for SLWE	Yes	Yes	Yes
Component 6				
6.1	Network rehabilitation in Zahle (BWE)	Yes	Yes	Yes
6.2	Expanding service provision in Beit Mellat (NLWE)	Yes	Yes	No – in Q4 of Y4**
6.3	Pump station rehabilitation in South Lebanon	Yes	Yes	Yes
6.4	Chlorination systems installation and training	Yes	Yes	Yes
Component 7				

7.1	Building customer service management structure at BWE	Yes	No	N/A
7.2.1	Customer Service training at BWE and BMLWE	Yes	No	N/A
7.2.2	On-the-job training in communication planning	Yes	No	N/A
7.3.1-7.3.2	Design and implement WE brand identity guidelines and design and implement corporate website	Yes	No	N/A
7.3.3	Design and adopt customer service application forms	Yes	No	N/A
7.4	Customer satisfaction survey	Yes	No	N/A
7.5	Youth water conservation programs	Yes	No	N/A
7.6.1	Media campaign in the Bekaa	Yes	No	N/A
7.6.2	World Water Day 2012 youth outreach	Yes	No	N/A

ERAC = Environmental Review and Assessment Checklist

EMMP = Environmental Mitigation and Monitoring Plan

* = These EMMPs were originally planned to be completed during Q1 of Y4, but the activities were not finalized during Q1, Q2, or Q3.

** = These EMMPs were originally planned to be completed during Q2 of Y4, but the activities were not finalized during Q2 or Q3.

Environmental Compliance Table 2:

LWWSS Environmental Mitigation & Monitoring Actions		
Activity # (as per Y4 Workplan)	Activity Description	Environmental Mitigation and Monitoring Update (as of June 30, 2013)
5.1	Source metering installation and training	The ERAC and EMMP were approved by LWWSS' COR at the end of the third quarter of year three.
		An initial EMMP was included in the subcontract with Modon (signed in April 2012), the vendor that is supplying and installing source meters at up to 221 sites. A more detailed EMMP, as well as an environmental mitigation inspection checklist, was given to Modon personnel at the end of the second quarter of year three and discussed in detail with them.
		As per the EMMP, Modon's site supervisor is responsible for ensuring that all mitigation measures are followed and must complete an environmental mitigation inspection at each site. These checklists should be turned in with monthly reports. LWWSS' M&E specialist is coordinating with Modon for the filling of the checklists.
		Preparation works for the installation of source meters began at the end of the fourth quarter of year three, and installation of the source meters started on June 21, 2013. An LWWSS engineer is on site four days/week to supervise Modon's work.
		LWWSS' ES will go on site visits twice per quarter with the LWWSS engineer to ensure that all mitigation measures are being followed. Photos will be included in the EMMP monitoring files.
5.2.1-5.2.2	Jeita pump station rehabilitation	The rehabilitation was completed in the second quarter of year four. The BMLWE engineers have completed the environmental mitigation inspection checklists and delivered them to the LWWSS' ES and M&E specialist during the second quarter of year four. Also, the commitment letter from BMLWE's Director General (DG) concerning the environmental mitigation process was received. The letter and checklists are included in the EMMP monitoring files.

5.2.3-5.2.4	Pump station rehabilitation in North Lebanon	This activity has been delayed and began during the second quarter of year four with well assessment tests taking place, followed by the design of the rehabilitation of pump stations (to take place during the fourth quarter of year four). LWWSS' M&E specialist will complete the ERAC and EMMP during the fourth quarter of year four.
5.3	Back-up power generators for NLWE pump stations	<p>The ERAC and EMMP were approved by LWWSS' COTR during the fourth quarter of year three.</p> <p>The EMMP, as well as an environmental mitigation inspection checklist, was included in the subcontract with Edan Group International (signed in September 2012), the vendor that is supplying and installing the back-up generators.</p> <p>There have been two amendments to the EMMP during the second quarter of year four, both dealing with mitigation of the noxious exhaust from the generators. The second amendment was approved by LWWSS' COTR during the second quarter of year four.</p>
		The installation of the generators began in the third quarter of year four, and Edan Group International's site manager is ensuring that the mitigation measures are followed at each site and completing the checklist. LWWSS engineers are on site during the installation, and the LWWSS M&E Specialist is collecting and reviewing the checklists, and will also conduct monthly site visits to ensure that mitigation measures are being followed.
5.4	Upgrading water analysis laboratories in SLWE and BWE (Y3) and rehabilitation and equipment procurement in BWE (Y4)	<p>-The ERAC and EMMP for the year three activities in SLWE and BWE were approved by LWWSS' COTR during the second quarter of year three.</p> <p>-The ERAC and EMMP for the year four activity with BWE will be completed in the second quarter of year four.</p> <p>LWWSS' capacity building specialist and engineers conducted frequent site visits to the laboratories throughout year three to ensure that all mitigation measures were followed and reported back to the ES, as well as taking photos for documentation. The ES also conducted a couple site visits to both SLWE and BWE and found that all mitigation measures were being followed.</p>

		<p>As per the EMMP, both the SLWE Director General and the BWE Director General signed commitment letters agreeing to follow detailed safety procedures during use of the equipment and to dispose of laboratory equipment in an environmentally responsible manner at the end-of-useful life of the equipment.</p>
		<p>For the year four activity with BWE, as with the year three activities, the ERAC and EMMP will require the same training activities to be conducted, as well as commitment from the WE to abide by safety measures and environmentally responsible disposal. LWWSS' ES will request a commitment letter from BWE's Director General in this regard.</p>
		<p>The ERAC and EMMP for the year four activity with BWE was completed in the second quarter of year four and sent to the COR. The EMMP was revised in the third quarter after having identified with the BWE Head of Laboratories and AUB an adequate microbiological waste disposal, and after having designated a solid waste landfill. The ERAC and EMMP were sent to the COR in the third quarter for approval.</p>
		<p>The LWWSS M&E specialist coordinated with Sanabel regarding the mitigation measures, and conducted a site visit to the lab during rehabilitation works to ensure that mitigation measures are being followed. Photos are included in the EMMP monitoring files.</p>
<p>5.5</p>	<p>Customer Service Center in BWE</p>	<p>The ERAC and EMMP were approved by LWWSS' COTR during the third quarter of year three.</p> <p><i>Rehabilitation</i> - The contractor ensured that all mitigation measures were followed, and completed an environmental mitigation inspection checklist and turned this into the ES. LWWSS' Customer Service Specialist conducted frequent site visits during the rehabilitation and reported back to the ES, as well as taking photos for documentation. All photos are included in the EMMP monitoring files.</p> <p><i>Operation</i> - As per the EMMP, the BWE Director General signed a commitment letter to follow the mitigation measures during operation. The ES also conducted a couple site visits to the customer service center during operation to ensure that these measures are being followed and took photos for documentation. All photos are included in the EMMP monitoring files.</p>

5.6	Upgrade IT equipment in BWE	The ERAC and EMMP were approved by LWWSS' COTR during the second quarter of year three.
		As per the EMMP, the BWE Director General signed a commitment letter agreeing to dispose of IT equipment in an environmentally responsible manner at the end-of-useful life of the equipment.
	Upgrade IT equipment in SLWE	'The ERAC and EMMP for SLWE were approved by LWWSS' COTR during the second quarter of year four. As per the EMMP, the SLWE Director General signed a commitment letter agreeing to dispose of IT equipment in an environmentally responsible manner at the end-of-useful life of the equipment. The letter is included in the EMMP monitoring files.
5.7	GNSS procurement and training for SLWE	The ERAC and EMMP were approved by LWWSS' COTR during the second quarter of year three.
		As per the EMMP, the SLWE Director General signed a commitment letter agreeing to dispose of the GNSS equipment in an environmentally responsible manner at the end-of-useful life of the equipment.
6.1	Network rehabilitation in Zahle (BWE)	The ERAC and EMMP were turned into the LWWSS COTR at the end of the fourth quarter of year three and it was approved during the first quarter of year four.
		Environmental compliance language was included in the subcontract with WET, the contractor that is designing and supervising the network rehabilitation.
		The EMMP was developed after the preliminary design was submitted by WET and WET was given the EMMP and the environmental mitigation inspection checklist developed by LWWSS' ES.
		The EMMP was included in the subcontract with the construction subcontractor, who will be responsible for following mitigation measures during the rehabilitation. WET will be responsible for monitoring the construction subcontractor and will fill out the checklists and turn them in with monthly reports.

		The rehabilitation began on May 27, 2103, in the third quarter of year four. The LWWSS M&E Specialist is coordinating with WET and receiving the checklists. The LWWSS' ES will conduct site visits twice quarterly to ensure that all mitigation measures are being followed.
6.2	Expanding service provision in Beit Mellat (NLWE)	This activity will begin during year four. The ES will complete the ERAC and EMMP during the fourth quarter of year four after the subcontractor has completed the preliminary design.
6.3	Pump station rehabilitation in South Lebanon	<p>This activity will begin during year four. The ES completed the ERAC and EMMP during the second quarter of year four when the final design was completed by CDM Smith and their subcontractor DEP. The LWWSS M&E specialist requested and received a commitment letter by SLWE DG regarding the use of the Ras Al Ain landfill for excavation waste and decommissioned equipment eventual disposal.</p> <p>The ERAC and EMMP were submitted to LWWSS COR during the second quarter of year four and awaiting approval.</p>
6.4	Chlorination systems installation and training	<p>The ERAC and EMMP were approved by LWWSS' COR during the first quarter of year three.</p> <p>LWWSS' capacity building specialist and engineers conducted frequent site visits to chlorination sites throughout year three to ensure that all mitigation measures were followed and reported back to the ES, as well as taking photos for documentation. Photos are included in the EMMP monitoring files.</p>

ERAC = Environmental Review and Assessment Checklist

EMMP = Environmental Mitigation and Monitoring Plan

M&E Specialist = LWWSS Monitoring and Evaluation Specialist