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QUARTERLY PROGRESS REPORT APRIL – JUNE 2010

EGYPT WATER AND WASTEWATER SECTOR SUPPORT PROJECT

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

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Acronyms and Abbreviations

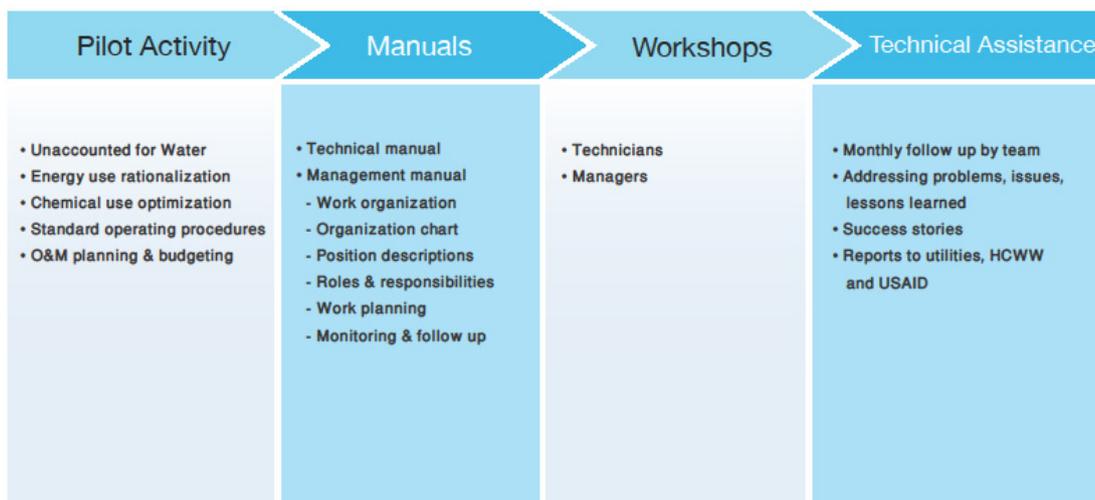
AWWA	American Water Works Association
CIP	Capital Investment Planning
CMMS	Computerized Maintenance Management System (CMMS)
COP	Chief of Party
DCOP	Deputy Chief of Party
DRB	Dispute Resolution Board
EPA	Environmental Protection Agency
FaDWaSP	Fayoum Drinking Water and Sanitation Project
GIS	Geographic Information System
GOE	Government of Egypt
GTZ	Gesellschaft für Technische Zusammenarbeit
HCWW	Holding Company for Water and Wastewater
HRD	Human Resources Development
ISSIP	Integrated Sanitation and Sewerage Infrastructure Project
IT	Information Technology
MARS	Monitoring and Analysis Reporting System
MHUUD	Ministry of Housing, Utilities, and Urban Development
MIS	Management Information System
NOPWASD	National Organization for Potable Water and Sanitary Drainage
O&M	Operations and Maintenance
OJT	On-the-job Training
PA	Public Awareness
PCU	Program Control Unit
PMP	Performance Monitoring Plan
PMU	Project Management Unit
PPP	Public-Private Partnership
TOT	Training of Trainers
UAS	Unified Accounting System
UFW	Unaccounted-for Water
USAID	United States Agency for International Development
WPRR	Water Policy and Regulatory Reform Project
WWC	Water/Wastewater Company
WWSS	Water and Wastewater Sector Support Program
WTP	Water Treatment Plant
Y2WP	Year 2 Work Plan

Executive Summary

This Quarterly Progress Report details activities and accomplishments of the USAID-funded Water and Wastewater Sector Support (WWSS) Program from April 1 to June 30, or months six through eight of project year two. The majority of program efforts this quarter were focused on fine-tuning, through replication, our approaches to activities which have proven fruitful. To a large extent, by the close of the quarter, we had identified those activities with the most potential for impact, and we are now turning our attention to finding ways to sustain them for the future.

Our approach emphasizes not only on achieving technical gains, such as the reduction of water losses at a utility, but also instilling in the sector the capacity to build upon the technical achievements into the future. To do so, as illustrated in the chart below, for every promising intervention we implement a similar bundle of activities – pilot projects, refining of approaches, replication in additional locations, and development of tools and capacity for sustainability. This ensures that we equip our counterparts with improved approaches, skilled employees, and organizational reforms, so that they can continue develop their institutions in the long term. We continue to focus program efforts on HCWW and subsidiary priorities in the following areas:

Our Technical Assistance Approach



- Business planning
- Financial management, focusing on the Unified Accounting System, budgeting, cost accounting (and eventually tariff rate design), and system automation using ADVAC software in 10 out of the 12 targeted subsidiaries
- Human resources management and development, including the introduction of HR and payroll management information systems
- Capital investment planning and program management

- Operations and maintenance, with emphasis on O&M planning and budgeting, development of standard operating procedures for water and wastewater treatment plants, energy use rationalization, and chemical use optimization
- Unaccounted for water, covering both commercial and technical aspects, and
- Public outreach and education, focusing mainly on the development of a corporate communication strategy for the Holding Company, and guidelines for utility-level public awareness programs

We have had considerable program success over the past quarter. Noteworthy achievements include:

- *The finalization of the Luxor UFW pilot program.* WWSS activities highlight the potential for nearly 35% reduction in UFW. Subject to the fulfillment of certain commitments by the Luxor WWC, this methodology will be rolled out elsewhere in Luxor City, and we have already started replicating the pilot in Sohag and Assiut. We are also developing manuals and training of trainers programs to institutionalize the program to the greatest extent possible.
- *Completion of HR organizational guidelines.* A series of workshops with subsidiaries and discussions with the Holding Company culminated with agreement on suggested guidelines for subsidiary HR divisions, including organizational charts, functional descriptions, position descriptions, and HR plans. A number of the subsidiaries have already completed their HR division designs, and the rest are expected to complete this activity in the upcoming quarter.
- *Intensive progression of business planning efforts.* Six WWSS-supported companies have now completed their draft business plans, and we initiated work with four others who will complete their plans by September 30. Impressive buy-in to this task has been provided from subsidiary management, and strong synergies are derived from the business planning exercise for other WWSS tasks, for example in HR unit support or in communications planning.
- *Finalization of communications strategy.* Our communications strategy activity, begun in March, is now complete, with the endorsement and support of the HCWW leadership, as well as the subsidiary chairmen and their public awareness/relations teams.
- *Chemical optimization.* Our chemical optimization activity, originally planned for Minya and Menufiya, has now been expanded to eight governorates: the original two, in addition to Giza, Sohag, Luxor (now complete), and Beni Suef, Aswan and Matrouh (to be completed by September). Plants using our methodology experience financial savings as well as improved systemization of water quality. WWSS is developing training-of-trainer to allow benefits to be more broadly disseminated.

Many tasks within our Year 2 work plan, for which we have now passed the half-way point, are complete. This has allowed us to replicate those tasks that are most useful and to add activities that have surfaced as priorities through our ongoing interaction with our counterparts. Section 5 of this QPR highlights these emerging areas of engagement, as does the Activity Tracker in the Annex A. These areas include the following:

- Additional support to subsidiaries in **business planning**
- Ongoing installation, training and technical support on the **finance and HR information system (ADVAC)**
- Ongoing support for and engagement with subsidiary **HR departments**
- **UFW** rollout in additional governorates
- Rollout of our **Computerized Maintenance Management System (CMMS)** in additional treatment plants.
- **Construction management** projects in three utilities
- **Energy rationalization** in additional governorates

- **Chemical optimization** in additional governorates
- Activating **cost accounting departments** in selected governorates.

With the conclusion of the above tasks, we plan to switch gear in year three to concentrate on business planning and capacity building. Starting October 2010, our efforts will focus on assisting the WWCs on refining their business plans, and helping them implement priority programs outlined therein. Specifically, we plan on extracting programs related to infrastructure O&M and rehabilitation, service improvements and, in some cases, on capital investments identified in their respective master plans. Concurrently, we plan to launch a series of training of trainers activities to build local capacity in key technical areas; namely, energy use rationalization, chemical use optimization, and water loss reduction, three areas with the highest potential for performance improvement and lowering of O&M costs. To further build capacity in the sector, we will focus on launching and promoting the Seminar Series for Senior Utility Executives in cooperation with the American University in Cairo, and initiating the operator and lab analyst certification training program with our partners at the Holding Company.

Introduction

The USAID-funded Water and Wastewater Sector Support (WWSS) program (2008 – 2012), implemented by Chemonics International, is strengthening the capacity of national and regional water and wastewater companies to deliver quality services in a cost-effective fashion. By providing technical support in utility management, the project team is assisting water and wastewater companies to implement recent Government of Egypt reforms aimed at improving operational performance and attracting private investments to the sector. To achieve these goals, the project has four key objectives:

- Increase financial and commercial viability of existing water and wastewater companies
- Establish new regional water and wastewater subsidiaries
- Develop and implement a capital investment planning and program/project monitoring and management mechanism, and
- Build the capacity of staff, increase managerial, technical and operational efficiency, improve the quality of services, and expand access to water and sanitation

The WWSS strategy to achieve these objectives is built on the following four pillars:

- Business plan as a central management and accountability tool
- Flexibility and prioritization of interventions: customer-driven, flexible, and responsive ability to address urgent priorities as the sector evolves
- Leveraging partners' expertise and the resources of other technical assistance providers
- Elevating human resource development and organizational change to strategic levels

This Quarterly Progress Report details activities and accomplishments of the USAID-funded WWSS Program from April 1 to June 30, or months six through eight of project year two. The report discusses progress achieved during the quarter against the tasks laid out in our work plan as well as descriptions of additional activities undertaken by the WWSS team beyond our Year 2 Work Plan. The report is organized around the following sections:

1. Assistance to the Holding Company
2. Cross-cutting activities targeting one or more subsidiary company in a particular functional area of operations
3. Subsidiary-specific activities relating to tasks undertaken with a particular utility, among the 12 mandated in our scope of work, namely: Aswan, Luxor, Qena, Assiut, Sohag, Minya, Beni Suef, Giza, Cairo, Matrouh, Menufiya, and Daqahliya
4. Program development and coordination efforts, and
5. Activities implemented beyond our work plan activities

For the purpose of facilitating monitoring and follow up, we have included, in Annex A, an Activity Tracker, summarizing the status of program activities against the work plan timeline. This tracker now includes activities taken on beyond our Y2WP. Additionally, the narrative includes every work plan task, with reference to the planned dates.

1. Component A: Assistance to the Holding Company for Water and Wastewater

HC 1 -- Establish and facilitate a Joint HCWW-WWSS Working Group (*Months 1-12*). The Joint HCWW-WWSS Working Group remained relatively inactive during the last quarter, until late June, when we held a joint working group meeting at the Holding Company. Interdepartmental cooperation, however, has been excellent. In addition to helping HCWW with its forthcoming technology conference, our advisors worked very closely with Holding Company management and staff on a number of tasks including: Human Resources Development and Management Strategy, Corporate Communication strategy update, development and testing of the Computerized Maintenance Management Information System, as well as the procurement and installation of ADVAC finance and human resources information system. HCWW staff participation in our field trips and training activities also noticeably increased during the reporting period, as did the frequency of one-on-one briefings on a variety of WWSS initiatives, specifically UFW pilot activities, chemical use optimization, energy rationalization, and standard operating procedures for water treatment plants. All this however is no substitute to joint planning and program review, especially as we prepare for our third annual work plan, so we will continue the periodic joint working group meetings into next quarter.

HC 2 -- Assist in ongoing development of the HCWW business plan (*Months 3-12*). GTZ informed us that they would resume work on the HCWW business plan, now that the HCWW organization chart is completed. We will continue to play a supporting role. Such activities this quarter included the development of a corporate communications strategy and an HR strategy, to be integrated into the business plan. We also continued to link HCWW strategic objectives to the subsidiary business plans.

HC 3 -- Develop a corporate communication strategy (*Months 3-5*). During this quarter, we assisted the HCWW in updating its Communications Strategy and in preparing the accompanying Year 1 Action Plan, through weekly meetings with HCWW and Cairo Water Company officials. The first complete draft Communications Strategy and Action Plan was presented to HCWW leadership in a meeting held on May 9, and HCWW feedback and recommendations were included in the draft. After translation and review, the Strategy and Action plan were presented to the Public Awareness (PA) managers from all subsidiaries at a workshop held June 14 and 15 in Cairo. During this workshop, PA managers provided feedback on the strategy, confirmed their buy-in to its implementation, and agreed to work with WWSS toward the development of the communications guidelines later this year.

The updated strategy and action plan were presented to subsidiary Chairmen during the Chairmen's forum held in Cairo on June 16, attended by HCWW Chairman and Vice-Chairmen. With the recommendations of subsidiary Chairmen incorporated, and their buy-in secured, the strategy was finalized and published at the end of the quarter. We will continue to support HCWW and subsidiaries in the implementation of the Strategy and Action Plan, including the development of communications guidelines for subsidiaries, a WWSS task planned for later this year.

HC 4 -- Provide ongoing support to the public awareness unit (*Months 1-12*). We held weekly meetings with the HCWW public awareness unit and supported several activities, including:

- **Communications strategy.** See HC 3, above.
- **HCWW quarterly newsletter.** During this quarter, we worked closely with the HCWW to produce the second issue of its quarterly newsletter. The HCWW adopted our proposed format and design, but the newsletter is still on hold, pending approval of editorial content. Our staff assisted in the establishment of an editorial committee for the newsletter, and assisted in writing and editing the stories, and in the layout and graphic design.
- **Design assistance for the planned international conference.** Our communication staff actively participated in the design committee meetings for the July conference on Sustainable Water Supply

and Sanitation, and worked closely with HCWW designers to produce and review designs for banners, booths, and print materials.

- **HCWW branded items:** At the request of the Holding Company, our staff prepared draft designs of HCWW promotional material, including bags, T-shirts and caps, featuring HCWW messages.
- **HCWW response to UN Human Rights report:** WWSS staff assisted HCWW respond to various points brought to light in the UN report on water as a human right in Egypt published in May.
- **Customer service and public outreach module for Advanced Management Seminar Series for Senior Utility Executives:** WWSS communications staff is providing ongoing assistance in the preparation of the Customer Service and Public Outreach AUC course module. See CC 2.

HC 5 -- Support the development of HCWW IT master plan (Months 1-12). As previously noted, we signed a contract late last March with ArabSoft, an Alexandria-based information technology consultancy, to prepare an IT master plan for the Holding Company and its subsidiaries. The ArabSoft team made a presentation to senior HCWW managers, met with Company staff and IT consultants and has already started collecting data and reviewing background material. The assignment, due for completion in mid-2011 includes: sector-wide needs assessment and due diligence; review of HCWW's strategic objectives to align the plan with them; drafting the IT Master Plan, including high-level requirements; and preparation of the implementation plan. Despite delays due to difficulties in arranging initial meetings, we expect the task to be completed on time.

HC 6 -- Develop a Human Resource Management and Development Strategy (Months 6-9). To complete the HR Strategy development process initiated last quarter, we held a series of working meetings with the HCWW HR team to draft and refine the document. The strategy includes five-year goals for the various human resource management and development functions at the HCWW, and a detailed action plan for the first year of implementation. Highlights include plans to develop performance management and evaluation systems throughout the sector, utilize the Center of Leadership for high-level management trainings, and integrate HR information systems across the sector. After two reviews by HCWW staff, the strategy was delivered to the HR Division Head for final review in late May. A presentation to the HCWW Chairman and Vice Chairman is drafted and planned, but the date has not yet been scheduled.

HC 7 -- Assist in development of HCWW position descriptions (Months 3-5, 8, and 11). In the April donor project coordination meeting (see task HC 11 below), GTZ informed us that they are working on this task with the HCWW on this task, having just celebrated the approval of the new HCWW organization chart which they supported. In agreement with the Company Vice-Chairman, we will confine our role to developing a staff performance evaluation system. A meeting on this subject is scheduled for July 24.

HC 8 -- Procure and install a human resource management information system (Months 3-12). Please refer to section CC13 below for a discussion of the HR MIS in the context of the installation of the ADVAC accounting, payroll and human resources management software. Also this quarter, we assessed the needs of the HCWW HR unit regarding an HRIS, and concluded that a new system is not required. Rather, enforcement of a regular reporting system from the subsidiaries to the HCWW will address the problem more directly and less expensively.

HC 9 -- Conduct study of financing options for implementation of the rural sanitation strategy (Months 4-5). At the request of the HCWW during the January 11, 2010, WWSS Board of Directors meeting, this task was reformulated to focus on the credit-worthiness and financing options for the Cairo Water Company. The study is progressing, albeit slower than expected. Our consultant, Mr. Lamy Makary has nearly completed data collection. He met with Mr. Khaled Gomaa, an HCWW financial analyst, and the CWC finance manager and obtained from them historical financial data on the Cairo Water Company, consisting mainly of performance indicators and financial statements, along with data on tariffs, quantity and value of water sold per customer class, and investment plans. Investment planning data were extracted directly from the Company's master plan. The draft report is expected in mid-July.

HC 10 -- Support the establishment of an HCWW PMU (Months 1-12). During this quarter, a new counterpart was appointed at HCWW: Dr. Salah Bayoumi, Head of the Construction Department Sector, who now supervises Dr. Hossam Kashef, Director General for Planning and Follow Up. However, an additional two engineers who were supposed to be in Dr. Kashef's group were transferred to other departments, leaving only two people in this department. The lack of counterpart staff at HCWW is a challenge; for example, due to these staff shortages, HCWW representatives were absent at most of the weekly MHUUD meetings.

We procured equipment this quarter for the HCWW PMU as part of the overall WWSS procurement for HCWW. Additionally, on April 27th, HCWW and subsidiary PMU staff participated in a workshop on project chartering and contracting. A project charter is a high-level project concept document that summarizes a project's objectives, justification, cost, and scope, and its development is a key step in the project contracting process. The workshop covered the definition and importance of a project charter, the life cycle of project implementation, managing its duration and implementation steps, tracking and analyzing costs and benefits, and necessary procurement procedures, among other points covered. Following the workshop, our staff has followed up with a number of WWSS-supported companies to encourage use of the tools and concepts presented and, in some cases, has confirmed that the companies are using them. Our staff also facilitated the participation of HCWW PMU staff in the weekly meetings of WWSS and WPRR staff at the Ministry of Housing.

HC 11 -- Facilitate coordination among donor projects (Months 1-12). During the quarter, monthly meetings with donor project teams continued, with an April meeting at GTZ's premises, attended also by the Dutch FaDWaSP project. The same group met in May at the WWSS premises. Meetings are focused on identifying ways to leverage mutual resources and work products. Coordination efforts expanded this quarter to include UNICEF, which is currently finalizing its MOU for continued collaboration with the sector on public outreach and education. Current cooperation includes:

- **Computerized maintenance management systems (CMMS).** We worked closely with the FaDWaSP project to develop, test, and train on the WWSS-developed Computerized Maintenance Management System (CMMS). After testing in the Fayoum Sennoures plant, our MIS Specialist finalized the program and developed administrator and user manuals. The two project teams developed and delivered training for maintenance engineers at the five companies participating in the roll-out (Minya, Beni Suef, Sohag, Assiut, and Qena), and plan to roll-out the system in the coming quarter.
- **Public awareness activities with UNICEF.** In a June meeting with the UNICEF Water, Environment, and Sanitation Officer, we agreed to collaborate on public awareness activities in the coming quarters. We will participate in their training programs for subsidiary public awareness units, and we will conduct peer reviews of each other's material to ensure consistency of messages. UNICEF also provided useful comments on the HCWW Communications Strategy.
- **Concept paper development with the Swiss Embassy.** The WWSS capital investment planning and program management team held numerous discussions with the Swiss Embassy representative to develop the concept paper for cooperation on a construction management task in Sohag (See AST 15 and Beyond 6). The concept paper has been presented to the Swiss embassy for review.
- **Ongoing coordination with GTZ.** Our coordination with the German TA to the Holding Company and the Qena Water and Wastewater Company focuses on three areas: (1) contribution to their Management Career Path development activity by providing peer review of their training material and participate their development committee. This quarter, a WWSS consultant participated in the committee to review existing training courses, and developed course outlines for approximately 15 management training course for the career path; (2) cooperation on the delivery of the Chairmen forums; and, (3) mutual assistance on the Qena business planning exercise, by linking our activities with the GTZ-supported strategic planning process.

HC 12 -- Sponsor HCWW HR Management Diploma candidates (Month 3). WWSS is supporting five HCWW candidates for the HR diploma offered by AUC.

2. Component B: Cross-Cutting Activities

CC 1 -- Facilitate business plan exercises in WWSS-supported subsidiaries (Months 1-12).

Subsidiary engagement with business planning activities remains strong. To date, over 240 staff members have participated in WWSS organized business planning workshops. In Qena, board members from the utility as well as local and national government stakeholders (including local governorate officials as well as representatives from the ministries of Irrigation and Health) participated in business planning workshops, and their concerns were incorporated into the draft plan. Also, in Qena, more than 60 company staff participated in the business planning review workshop, and the Chairman signaled his strong support of business planning activities. Such activities in Qena continue to move forward in close coordination with GTZ, whose team is closely engaged in the process.

During the quarter, Sohag and Qena completed their draft business plans and held review workshops to ensure company-wide buy-in. Adding to this the four governorates which already completed their business plans - Giza, Menufiya, Assiut, and Luxor - a total of six business plan drafts have now been completed. In Matrouh, the process is underway, and a review workshop was held in June. Their draft business plan will be finalized in July. This will complete the seven business plans outlined in the year two work plan.

We note in passing that business planning coordinators from Giza and Luxor participated in the business planning workshop of Matrouh, fostering peer-to-peer sharing of experience between business planning units. Coordination and communication between subsidiaries related to business planning activities carries great promise for sustaining the business planning activity in the future.

The following table summarizes progress of business planning activities thus far:

WWSS Business Planning Program Milestone Status and Schedule											
Milestone	Work Plan Task #										
	**Menufiya 1	**Assiut 1	*Giza 1	*Luxor 2	*Sohag 1	Qena 1	Matrouh 1	Aswan (no Y2WP #)	Beni Suef (no Y2WP #)	Minya (no Y2WP #)	
1 Business Planning Training Workshop	Jun-09	Jun-09	Jun-09	Jun-09	Jul-09	Feb-10	Jun-10	Jun-10	Jul-10	Jul-10	
2 Business Plan Development & Technical Assistance	Dec-09	Dec-09	Feb-10	Feb-10	Mar-10	Apr-10	Jun-10	Jul-10	Sep-10	Sep-10	
3 Business Plan First Draft-Complete	Dec-09	Dec-09	Mar-10	Mar-10	May-10	May-10	Jul-10	Jul-10	Sep-10	Sep-10	
4 Business Plan Review/ Buy-in Workshop	Jan-10	Jan-10	Feb-10	Mar-10	May-10	Jun-10	Aug-10	Sept-10	Oct-10	Oct-10	
5 Business Plan Final Draft- Complete	May-10	May-10	May-10	May-10	Jun-10	Jun-10	Jun-10	Jun-10	Jul-10	Jul-10	

Shading indicates achievement of a milestone.
***WWCs that have initiated implementation of the programs in their WWSS-supported draft business plans.*
**Companies (3) where business planning units are being established.*

We briefed Eng. Moenes Youannis, USAID Team Leader for Water Policy Reform on subsidiary business planning activities at the WWSS office on May 27th, and sent recently completed business plans, for Giza and Assiut, to HCWW for review.

CC 2 -- Design and implement an Advanced Management Seminar Series for Senior Utility

Executives (*Months 6-12*). Course development for the series' ten modules continued throughout the quarter (see box) through joint meetings, review, and development between ten AUC instructors and WWSS counterparts. In June, selection criteria for trainees were established jointly by the project, AUC, and the HCWW, and candidates from the 12 WWSS-supported governorates were screened through an interview and testing process. The first iteration of the course will begin ahead of schedule in July, and will last through the first quarter of 2011.

Advanced Management Seminar Series for Senior Utility Executives Course Modules

1. Legal and regulatory framework of the water and sanitation sector
2. Organizational development and human resources management
3. Strategy development and corporate planning
4. Financial management and business analysis
5. Customer service and public outreach
6. Capital investment planning and program management
7. Construction management and supervision
8. Operation and maintenance
9. Management information systems and technologies
10. Procurement and outsourcing

CC 3 -- Design and conduct monthly

leadership forum (*Months 2-12*). In the opening days of the reporting period, we supported the HCWW in preparing the material and organizing its monthly forum for utility chairmen, focused on the legal and regulatory framework governing the water and wastewater sector. In addition, the June forum featured presentations by the WWSS team to the chairmen on (1) the WWSS/HCWW developed Communications Strategy, and (2) the latest developments concerning the Advanced Management Seminar Series at AUC. Should the HCWW request assistance with an additional forum, we remain available to assist, and have suggested such topics as: business planning, finance for non-finance managers, and strategic human resource management and development.

CC 4 -- Implement two study tours to world-class water and wastewater institutions and international conferences

(*Months 1-7*). The first US observational study tour (OST#1), concluded in February 2010, featured visits by the USAID Water Sector Reform Team Leader and HCWW leaders to places of interest in San Francisco, Washington, DC, and Denver, Colorado, as reported last quarter. A re-entry workshop was held in April at the HCWW, attended by USAID and HCWW participants, to evaluate the experience, solicit feedback, and ensure the transfer of lessons learned to the Egyptian sector.

The second OST, scheduled for May, has been postponed until September due to difficulties in processing of visas for the participants. The itinerary from the trip has been revised based on the new timeline (see below), and the detailed planning is underway. All paperwork has been submitted to TrainNet, and upon receiving the appropriate documentation from USAID, we will proceed with the US Consulate interviews and visa applications.

Water & Wastewater Sector Support Program Overseas Study Tour #2 Boston, MA September 25-October 4, 2010	
Dates	Preliminary Agenda
Sep 25 Saturday	Travel to USA, arrive Boston
Sep 26 Sunday	Rest Day, City tour and orientation to program
Sep 27 Monday 9:00 a.m.	Introduction to MWRA system on bus, escorted by Charles Button, Chief Engineer Site Visit: MWRA's John Carroll Water Treatment Plant Topics to discuss: <ul style="list-style-type: none"> • Response to recent water main break • Unaccounted for water and how it has changed over the years • Water treatment • Service quality standards • Standard operating procedures
Sep 28 Tuesday 9:00 a.m.	Site Visit: Boston Water and Sewer – Water <ul style="list-style-type: none"> • Water distribution system <ul style="list-style-type: none"> – Design – Standard operating procedures – Geographical Information Systems – Work order management – Communicating with field crews – Non-revenue water management and water theft control • Billing and collection <ul style="list-style-type: none"> – Automated meter reading – Non-revenue water management and theft control
Sep 29 Wednesday 9:00 a.m.	Site Visit: Boston Water and Sewer – Wastewater <ul style="list-style-type: none"> • Stakeholder involvement and customer responsiveness • Collection system management <ul style="list-style-type: none"> – Standard operating procedures – Infiltration/Inflow • Safety • Service quality standards
Sep 30 Thursday 9:30 a.m.	Site Visit: MWRA - Wastewater <ul style="list-style-type: none"> • Boston harbor history - pollution • Wastewater treatment – Deer Island tour and visitor's center • Bio-solids and residuals disposal • Master planning, investment planning, funding and project management • Community advisory board • Industrial pre-treatment
Oct 1 Friday 9:00 am	Narragansett Bay Commission, Providence, RI Wastewater Agency for State of Rhode Island
Oct 2 Saturday	Program evaluation and roundtable discussion on lessons learned
Oct 3 Sunday	Part of the day off and travel back to Cairo
Oct 4 Monday	Arrive Cairo

CC 5 -- Provide training to HR personnel (*Months 1-12*). To build upon last quarter's activities, we held a two-day follow-up workshop on HRD planning from April 19-20 in Minya, which was attended by HR staff and training staff from Assiut, Sohag, Luxor, Menufiya, Giza, Minya, Beni Suef, Matrouh, Aswan, Cairo, Qena and the HCWW. The training, attended by 30 participants (20 male, 10 female), focused on the development of HR plans at the subsidiary level. Following the workshop, our HR team worked closely with

subsidiaries to develop their draft HR plans, using a project-provided template. To date, six subsidiaries have completed their draft plans.

During this quarter, WWSS also developed tools for organizational design for use by the subsidiaries, including a sample organizational chart for the HR division, functional descriptions of each entity in the chart, and position descriptions for each position. These templates were discussed at length with the HCWW, who agreed that the subsidiaries would begin with this template and customize it for their own needs and organization. Six subsidiaries have completed this customization as part of their draft HR plans, and the remaining will complete the plans and HR division organizational design next quarter.

Our Year 2 Work Plan called for these activities in five governorates, but we have expanded it to include all 11 WWSS-targeted companies. Upon completion of the subsidiaries' draft plans, we will continue to provide support on an as-needed basis.

CC 6 -- Develop communications planning guide (*Month 12*). This activity is planned to start later this year. We built the foundation for this task this quarter during the presentation of the Communications Strategy to subsidiary public awareness and public relations department heads and to subsidiary chairmen in June, as described in HC 3. Valuable feedback, which was collected during these and other interactions with HCWW and subsidiaries, will be incorporated into the guidelines.

CC 7 -- Reengineer/upgrade MARS and provide ongoing support (*Months 1-12*). We continue to provide ongoing support to the operation of MARS at the subsidiaries. Additionally, to initiate the upgrade activity, representatives from WWSS, WPRR, and the HCWW met on June 16, 2010 to assess MARS implementation and discuss potential upgrades/modifications. A number of issues were raised, including: challenges with the system; the new requirements of the Holding Company; appropriateness of the indicators; and operational issues such as connection speed, roll-out to additional companies, and training needs. Subsequently, a separate meeting was held to discuss the indicators themselves and assess the need for changes. Potential changes to the system include, pending further discussion and agreement with the HCWW:

- Producing the indicators at the level of the branch / plant and integration with the ADVAC financial systems and others
- Deletion and/or change of a small number of indicators, and addition of more financial indicators
- Adopt a procedure for Chairman approval of the submitted MARS data, to ensure the seriousness of the information submitted
- Locking the possibility of modifying the data after a certain time limit
- Enabling review functions, with the ability to notify subsidiaries of likely errors and prompt them to correct data entered
- Activating the Cost Accounting Departments in the subsidiaries
- Integrating the MARS indicators system with MARS financial system
- Comparison capability, cumulative indicators, ordering of indicators, and identifying the reasons for variances

In cooperation with WPRR, we will study these requirements, estimate the time required for implementation, and prepare and initiate an implementation plan. We also agreed with our HCWW counterparts to coordinate our field visits and system monitoring activities.

CC 8 -- Conduct O&M planning and budgeting workshops (*Months 1-5; 7, 8, and 11*). Further workshops have been postponed, as we focused our efforts this quarter on field visits and hands-on assistance to the targeted companies to complete their O&M plans and budgets. To date, Giza company has completed its O&M plan and budget, and we are continuing our work with the others until completion (See Section 5). Additionally, we will hold two additional workshops for the remaining WWSS-targeted companies in Aswan, Minya, Beni Suef, Cairo, and Matrouh.

CC 9 -- Conduct field visit to Alexandria Water Company's laboratory (*Month 7*). This activity has been postponed until the end of July. As reported last quarter, the venue has been moved to Beheira.

CC 10 -- Conduct network management workshops (*Months 4, 7, 11*). This activity will be incorporated in the ongoing AUC seminar series reported on in CC2, to begin next quarter.

CC 11 -- Develop and deliver financial accounting and cost accounting manuals (*Months 1-4, 6-7, 10-11*). Final review of these manuals was completed this quarter, and the manuals were edited and formatted in the closing days of the reporting period. They will be published and disseminated next quarter.

CC 12 -- Conduct Unified Accounting System (UAS) training program (*Months 2-3, 6-7, 10-11*). This quarter, 19 trainees were provided training on UAS Part 1 in Matrouh, bringing the total number of trainees completing UAS training under the program to 168. Additional training will take place following the finalization of the manuals described in CC 11.

CC 13 -- Support installation of ADVAC system at select subsidiaries (*Months 1-9*). Pursuant to the request of HCWW and the approval of USAID, WWSS purchased ten ADVAC licenses – five for WWSS-supported subsidiaries and five others for subsidiaries identified by HCWW. To date, the software application – which consists of modules for general ledger, fixed assets, cost accounting, HR, and payroll – has been installed in four subsidiaries (Luxor, Assiut, Matrouh and Giza), and these four companies have received all three phases of WWSS assistance (installation, operation, and integration). These companies are now producing their financial statements and payroll statements using the ADVAC system.

In addition, we are nearing completion of the three stage ADVAC procedure in the fifth and final company identified in our work plan, Sohag. We have also initiated the process in an extra company - Menufiya (see also Section 5 below). ADVAC installation will be completed in these two utilities in the upcoming quarter.

CC 14 -- Provide ongoing PRiSM support (*Months 1-12*). During this quarter, we continued to hold weekly coordination meetings with MHUUD and HCWW to review progress with PRiSM implementation and recommend and implement system enhancements, including data verification approaches. A new version of PRiSM is currently being developed by WPRR, and we are coordinating closely with them to communicate the expectations and needs of the Holding Company. Once the updated version is complete, we will present it to senior HCWW staff, including the Chairman, to ensure their ongoing commitment to utilizing the program.

In addition, ongoing assistance was provided on PRiSM in all of the 12 governorates with which we are engaged. We provided regular follow up, as well as extensive training, to ensure regular and accurate updates of data into PRiSM. As a result of these activities, including daily phone calls to responsible staff, the level of updates for April and May reached 98%.

CC 15 -- Develop capital investment planning and budgeting manual, and provide orientation (*Months 1-5*). Capital investment planning (CIP) at the subsidiary level involves two components: 1) new projects, and 2) rehabilitation and renovation (R&R) projects. New projects are undertaken by NOPWASD, drawing upon input from HCWW. However, the R&R component is undertaken by HCWW and its subsidiaries. In order to effectively allocate R&R funds, HCWW and subsidiary staff need to understand GIS, hydraulic modeling, and asset management. This quarter, we initiated training in these three areas (GIS, hydraulic modeling, and asset management) in Assiut, Sohag, Luxor, Menufiya, Giza and Matrouh, and will continue the training next quarter.

These topics will be core components of the CIP and budgeting manuals that WWSS has prepared. The manuals, building upon the criteria and themes in the project prioritization tool, were developed this quarter, are currently under review, and will be published next quarter. These manuals will complement the training delivered, and will serve as a how-to guide for subsidiaries in CIP processes. In addition, they will serve as an input to the AUC diploma courses under development, described in CC 2.

To supplement this material, at the request of the HCWW, we are also preparing guidance documents on O&M contracting and Indefinite Quantity Contracting (for use in contracting R&R work), which are described further in Section 5.

CC 16 -- Develop and disseminate standard key documents for projects life cycle (*Months 1-6*). In coordination with WPRR, a draft of Volume I of the standard key documents was completed this quarter (see box) and submitted to USAID, MHUUD, EWRA, and the HCWW. After their review, the final version of Volume I will be published next quarter. Volumes II and III will be submitted for review next quarter.

**Standard Key Documents – Vol. I
Table of Contents**

1. Executive Summary
2. Project Life Cycle
3. Pre-Qualification of Consultants
4. Invitation to Provide Consulting Services
5. Request for Proposals for Construction Management
6. Pre-Qualification of Contractors
7. Elements of Construction Documents
8. Guidelines to General and Specific Conditions of Contract

CC 17 -- Develop site identification and acquisition procedures (*Months 6-8*). At the request of the Holding Company, this task has been cancelled. Site identification and acquisition procedures are not a pressing need, since sites for projects are allocated directly to the companies from the local or central government.

CC 18 -- Conduct planning and scheduling training program (*Month 5*). Task completed in February 2010.

CC 19 -- Coordinate with the WPRR Program on implementing the Operator Certification Program (*Months 6-8*). Pursuant to the request of the Ministry of Housing, the task has now expanded to cover water and wastewater treatment plant operators, as well as laboratory analysts in both the water and sanitation sectors. Our efforts build on the WPRR work related to the competency requirements, and their ongoing assistance to the Ministry and EWRA to develop and implement the certification programs. Our cooperation with the WPRR team culminated with a workshop early in June, during which representatives from that project informed us of the official status of the certification program, and shared with our team their progress to date, along with the documentation prepared.

Going forward, our task is to work closely with HCWW to develop the training courses for the certification program. The courses will be designed to enable water and wastewater operators and laboratory analysts to master essential concepts and pass the certification examinations in accordance with EWRA-approved guidelines. The course material and training delivery will be housed at HCWW, while the examinations will administered by the Building and Housing National Research Center. Eng. Mohamed Hashem will lead this task, supported by Ms. Kathleen Sheridan, who will prepare the scopes of work for short-term subject matter experts, and course and curriculum developers, and monitor and review their outputs. We expect to conclude this task, including pilot examinations, in 2011.

CC 20 -- Training of customer service and billing center staff (*Months 3-8*). As described last quarter, customer service and billing center activities will be confined to on-site technical assistance in subsidiaries with WWSS-supported UFW programs. As a complementary activity, the WWSS team will be providing equipment (printers, computers) via our procurement fund for the newly established billing and customer service centers. See also SOH 6 and AST 8.

3. Component C: Subsidiary-Specific Activities

Sohag Water and Wastewater Company

SOH 1 (See CC 1) -- Assist in the ongoing development of the Sohag WWC business plan (*Months 1-5*). The Sohag business plan was completed, and a review workshop was held at the company in May. Additional details are provided in CC 1. The Sohag Chairman has signaled his personal interest in the business planning process and outputs, which bodes well for the finalization of the plan.

SOH 2 (See CC 5) -- Launch Sohag WWC human resources department (*Months 1-5*). Kindly refer to section CC5. TA was also provided on developing HR plan in coordination with business planning activity.



Business Planning workshop in Sohag

SOH 3 -- Develop Sohag WWC staffing plan (*Months 2-5*). The staffing plan for Sohag will be initiated following the completion of the Sohag business plan.

SOH 4 (See CC 11, 12, 13) -- Strengthen Sohag WWC finance department (*Months 1-12*). During this quarter, we worked with the Sohag Finance Department by providing on-the-job training on cost accounting, budgeting, working with financial register systems, and managing the financial documents cycle. In addition, Sohag WWC participated in the ADVAC training described in CC13.

SOH 5 -- Support Sohag WWC warehouse and procurement unit (*Months 2-6*). As reported last quarter, this activity has been suspended, as we focus project resources on other priorities with higher expected return.

SOH 6 (See CC 20) -- Establish a billing and customer service center (*Months 4-6*). The building for the customer service and billing center in Sohag is completed. We will provide equipment for its facilities, train the staff (see CC 20), and continue related activities within the framework of the UFW program.

SOH 7 -- Assist in development of O&M plan and budget (*Months 6-9*). During the quarter, the WWSS O&M team continued to provide on-the-job training and follow-up to review and encourage progress in developing the plan and budget. In Sohag, the plan, including the budget, is 50% complete.

SOH 8 -- Enhance utilization of laboratory (*Months 7-9, 11-12*). Ongoing support was provided to the Sohag central lab, including: development of sample SOPs for physical and chemical analysis; and ongoing training on counting algae and microscopic examination procedures. Such recommended procedures are currently being compiled into a Lab Procedures Manual, to be published and disseminated next quarter in parallel with ongoing lab activities. Further, we have developed, and intend to deliver next quarter, a course on quality assurance and quality control of lab activities for WWSS-supported laboratories in Sohag, Beni Suef, and Minya.



GIS Training in Sohag

SOH 9 -- Provide technical and on-the-job training for Sohag GIS unit (*Months 7-12*). This quarter, licenses for ArcGIS, ArcInfo, WaterCAD, and SewerCAD were delivered to the subsidiary, and on-

the-job training was provided in their installation. Also, to facilitate the UFW program, additional on-the-job training was provided on: field surveying; digitizing maps from satellite images; and drawing, reading and correcting images and maps. Finally, an Introduction to ArcGIS I course was delivered to 11 staff members.

SOH 10 -- Support the establishment of the Sohag WWC PMU (See also tasks CC 14, 15, 16, and 17). (*Months 6-8*). During this quarter, WWSS provided the WWC equipment under the overall WWSS procurement, mostly software and computers (see also PDC 5). Additional items under procurement will be delivered next quarter. Also during this quarter, WWSS provided training on project chartering and contracting in April, described in HC 10, and on hydraulic modeling, described in CC 15.

Assiut Water and Wastewater Company

AST 1 (See CC 1) -- Assist in the ongoing development of the Assiut WWC business plan (*Months 1-5*). The draft Assiut business plan was completed in January 2010. Since then, the company continued to refine its contents, including programs and cost estimates, and issued another draft in May, 2010. The Assiut WWC is also working to establish a business planning unit, and has developed and organizational structure and job descriptions for such a unit. Additional details on the overall business planning process are contained in CC 1.

AST 2 (See CC 5) -- Launch Assiut WWC human resources department (*Months 1-5*). Kindly refer to CC 5.

AST 3 -- Develop Assiut WWC staffing plan (*Months 2-4*). This activity will be initiated next quarter, and will build upon the Assiut business plan. The WWSS-supported HR plan was used by the utility during the business planning process

AST 4 -- Establish Assiut WWC training center (*Months 5-9*). Pending the selection of a training center site, WWSS will support the center through the procurement of equipment. Should delays continue, WWSS may recommend establishing the training center in another location.

AST 5 (See CC 11, 12, 13) -- Strengthen Assiut WWC finance department (*Months 1-12*). During this quarter, we worked with the Assiut Finance Department by providing OJT on cost accounting, budgeting, financial register systems, and managing the financial documents cycle. In addition, Assiut WWC participated in the ADVAC training described in CC13.

AST 6 -- Support Assiut WWC warehouse and procurement unit (*Months 2-6*). This activity has been suspended to refocus project resources on other priorities with higher expected return.

AST 7 -- Establish a meter repair workshop (*Months 1-8, 11-12*). This task will be implemented within the context of the UFW program, later this year. The Assiut WWC has recently completed the tendering process for rehabilitation of the workshop, but the construction has not yet begun.

AST 8 -- Establish a billing and collections center (*Months 1-7*). The recently-completed billing center is currently open, awaiting additional equipment to be provided by WWSS. Upon delivery of the procured equipment, we will provide technical assistance to the billing and collections staff as part of the UFW program.

AST 9 -- Provide technical and on-the-job training for Assiut GIS unit (*Months 1-5*). This quarter, licenses for ArcGIS, ArcInfo, WaterCAD, and SewerCAD were delivered to the subsidiary, and on-the-job training was provided in their installation. Also, to facilitate the UFW program, additional on-the-job training was provided on: field surveying; digitizing maps from satellite images; drawing, reading and correcting images and maps; creating maps of various areas, including Abu Tig City.

AST 10 -- Assist in development of O&M plan and budget (*Months 7-10*). During the quarter, the WWSS O&M team continued to provide on-the-job training and follow-up to review and encourage progress in developing the plan and budget. In Assiut, the plan, including the budget, is 40% complete.

AST 11 -- Replicate JICA-developed SOPs in two plants (*Months 8-12*). As reported last quarter, SOPs have been completed for Nazlet Abdallah water treatment plant in Assiut, and development is underway for two additional plants: the University's compact unit and the Artesian well at El Hawetka). To supplement the SOPs, we worked this quarter on development simple, graphic, poster-size instructions for day-to-day use in the plants. For each plant, we will print multiple copies of the laminated work instructions and also provide copies of the corresponding files on CD for back-up purposes. In year three, we plan to produce a manual on

the development of operating instructions and conduct related workshops to enable WWCs to produce similar posters for their other water and wastewater treatment plants.

AST 12 -- Procure equipment for newly established Assiut WWC PMU (*Months 3-5*). Some equipment was delivered to the PMU this quarter as part of the overall WWSS procurement, especially hardware and software (Water and Sewer CAD, MS Project, GIS software), and the rest is expected to be delivered next quarter. See PDC 5 for more details on the status of procurement.

AST 13 (See CC 14, 15, 16, 17) -- Support the establishment of the Assiut WWC PMU (*Months 6-8*). During this quarter, WWSS provided training on project chartering and contracting in April, described in HC10, and on hydraulic modeling, described in CC15.

AST 14 -- Perform project management responsibilities (*Months 3-12*). As described above in CC 14, the WWSS program management team provided considerable hands-on support on the use of PRiSM to manage ongoing projects. Drawing upon the data in PRiSM, the WWSS team prepared a report for the utility showing the status of projects within the governorate.

AST 15 -- Provide technical assistance in managing one construction project (*Months 6, 8, 11*). Early in the quarter, discussions continued with the Swiss Embassy on possible collaboration with them on construction projects in Assiut and Sohag, and they selected only Sohag for the initial concept (see HC 11). In Assiut, then, we agreed with the WWC to move forward with a WWC-funded construction management project in one of three villages (Beni Sharan, Arab El Amain and El Tamna) that together form a cluster (the WWC will cover the construction management of the other two villages). The utility will tender the design work, and we will sign a cooperation protocol with the selected company.

Luxor Water and Wastewater Company

LUX 1 -- Develop and implement unaccounted-for water (UFW) pilot program (*Months 3-11*).

WWSS has finalized its pilot UFW activity within a pilot area of the Luxor governorate. The multi-stage systematic process involved measuring water flow, leak detection, installing and fixing meters, reducing illegal connections, and increasing billing and collections (see box).

Baseline measurements in Luxor indicated that approximately 50% of water produced is lost, either through physical losses through leakages, or commercial losses through inaccurate meters or illegal connections. This rate, well above the national average of 20-35%, represents a significant strain on utility operations.

The activities resulted in a significant reduction in losses in the pilot area, as follows:

- *Reduction in technical losses in the pilot area.* A high reduction in the UFW percentage in the pilot area was realized through discovering and fixing leaks. These activities reduced UFW by 32.2%. This reduction is high because the pilot area is located in old Luxor city, which contains a very old water network. 108 leaks were discovered in an area of 0.2 km².
- *Reduction in commercial losses in the pilot area.* Reduction in the UFW percentage in the pilot area due to the commercial activities is 4.5%. Activities in this sector included corrective actions for meter inaccuracy, broken meters, un-read meters, low flow un-registered by the meter, billing errors, customers with no records, and solving the losses due to governmental and religious buildings, illegal connections, and customers with no meters.
- *Reduction in losses in all of Luxor City.* Due primarily to corrective actions (mainly collections from large commercial and government customers), UFW city-wide was reduced from 50.18% to 30.2%, a reduction of 20%.

Key Steps in UFW Reduction Process

1. *Data baseline.* Data gathering and baseline analysis
2. *Collections.* Increasing rates of collection
3. *Leakage.* Identifying and addressing system leakage
4. *Meters.* installing, fixing and calibrating meters
5. *Meter reading.* Improving systemic ability to derive accurate meter data
6. *Billing.* Improving the billing process.

Further, significant training and technical assistance was provided to the Luxor WWC staff to enable them to carry out such activities in the future. After completion of project UFW manuals and training materials, we will roll out the UFW pilot into other city sectors (provided that the Luxor WWC meets agreed-upon commitments) and provide training to technicians and engineers added by the Company for this purpose.

LUX 2 (See CC 1) -- Assist in the ongoing development of the Luxor WWC business plan

(*Months 1-5*). A draft of the Luxor WWC business plan was completed in March 2010. Additional details on WWSS business planning activities are provided in section CC 1.

LUX 3 -- Develop Luxor WWC staffing plan (*Months 2-5*). This activity has been delayed until next quarter. Instead, we initiated work on the Menufiya staffing plan ahead of schedule.

LUX 4 (See CC 11, 12, 13) -- Strengthen Luxor WWC finance department (*Months 1-12*). During this quarter, we worked with the Luxor Finance Department by providing OJT on cost accounting, budgeting, financial register systems, and managing the financial documents cycle. In addition, Luxor WWC participated in the ADVAC training described in CC 13.

LUX 5 -- Update USAID-supported O&M management system (*Months 3-6*). Task complete. We continued to support the revived PMC 2000 O&M management system. During this quarter, we updated the program, and assisted the WWC in issuing work orders for three wastewater treatment plants to use the system. Also in the area of O&M, as described in Section 5, we continued to support the development of an O&M plan and budget, which is currently 60% complete.

LUX 6 -- Provide technical and on-the-job training for Luxor GIS unit (*Months 1-4*). This quarter, WWSS monitored GIS functionality within the UFW pilot program in Luxor, and assisted the local engineers to use GIS to identify maintenance locations. The WWSS GIS specialist also provided on-the-job training on the use of satellite images to adjust base maps, and the use of GIS to identify house connections and meter locations. In preparation for the rollout of the UFW methodology in other areas of Luxor, field surveys were carried out to prepare the GIS data foundation for this work.

LUX 7 -- Procure equipment for newly established Luxor WWC PMU (*Months 3-5*). Some equipment was delivered to the PMU this quarter as part of the overall WWSS procurement, especially hardware and software (Water and Sewer CAD, MS Project, GIS software), and the rest is expected to be delivered next quarter. See PDC 5 for more details on the status of procurement.

LUX 8 (See CC 14, 15, 16, 17) -- Support the establishment of the Luxor WWC PMU (*Months 6-8*). During this quarter, WWSS provided training on project chartering and contracting in April, described in HC10, and on hydraulic modeling, described in CC15.

Giza Water and Wastewater Company

A highlight of our work this quarter with Giza was the completion of the O&M plan and budget. The plan includes detailed projections of next year's O&M needs, and provides useful input to the WWC and the HCWW in higher-level planning and budgeting exercises. The draft plan was shared with the HCWW and WWC leadership. See also Section 5. Additional activities in Giza include:

GIZ 1 (See CC 1) -- Assist in ongoing development of Giza WWC business plan (*Months 1-5*).

The first draft of Giza's business plan was completed in February 2010. Additional details on the overall business planning process are contained in CC1.

GIZ 2 -- Finalize Giza WWC staffing plan (*Months 1-2*). This activity was completed and reported on in QPR 4, October – December, 2009.

GIZ 3 (See CC 11, 12, 13) -- Strengthen WWC finance department (*Months 2-12*). This quarter, the Giza Finance Department participated in the ADVAC training described in CC13.

GIZ 4 -- Establish circuit rider program for Giza WWC (*Months 2-9*). This activity has been cancelled. HCWW advised us late last year that they will procure the equipment and manage the program.

GIZ 5 -- Conduct audit of electricity and chemical use of Giza WWC (*Months 8-9*). Both the chemical and electrical audits were completed this quarter, with encouraging results. The chemical use audit resulted in a reduction in both chlorine and alum dosages, and a savings of over 10% of alum in the treatment process. The electrical analysis revealed a power factor of 72%, which results in fines from the electric company on the utility. To address this, we are in the process of purchasing a power factor correction panel, which will enable the plant to maintain its power factor at on/around 92%, saving over 250,000 LE/year. Additionally, to sustain the electricity rationalization activities, we are in the process of purchasing an analyzer for the company so they can perform similar analyses in additional plants.

GIZ 6 and 7 -- Establish a meter repair workshop for Giza WWC (*Months 1-8; 11-12*), and **Assist Giza WWC with customer service center establishment** (*Months 1-5*). Moving forward, tasks related to meter repair and customer service will be confined to UFW programs. In Giza, these activities will be reconsidered in the context of future UFW programs, possibly in Year 3.

GIZ 8 -- Provide technical and on-the-job training for Giza GIS unit (*Months 3-7*). This quarter, licenses for ArcGIS, ArcInfo, WaterCAD, and SewerCAD were delivered to the subsidiary, and on-the-job training was provided in their installation. Additional on-the-job training was provided on: field surveying; digitizing maps from satellite images; and drawing, reading and correcting images and maps. In addition, formal training on ArcGIS and ArcView was provided for 14 staff members.

GIZ 9 -- Procure equipment for newly established Giza WWC PMU (*Months 3-5*). Some equipment was delivered to the PMU this quarter as part of the overall WWSS procurement, especially hardware and software (Water and Sewer CAD, MS Project, GIS software), and the rest is expected to be delivered next quarter. See PDC 5 for more details on the status of procurement.

GIZ 10 (See CC 14, 15, 16, 17) -- Support the establishment of the Giza WWC PMU (*Months 5, 6, 8*). During this quarter, WWSS provided training on project chartering and contracting in April, described in HC10, and on hydraulic modeling, described in CC15.

GIZ 11 -- Perform project management responsibilities (*Months 3-12*). As described above in CC 14, the WWSS program management team provided considerable hands-on support on the use of PRiSM to manage ongoing projects. Drawing upon the data in PRiSM, the WWSS team prepared a report for the utility showing the status of projects within the governorate.

Menufiya Water and Wastewater Company

MEN 1 (See CC 1) -- Assist in ongoing development of the Menufiya WWC business plan

(Months 2-5). The Menufiya WWC draft business plan was completed in December 2009. Additional details on the overall business planning process are contained in CC 1.

MEN 2 (See CC 5) -- Launch Menufiya WWC human resources department.

(Months 2-4). Kindly refer to CC5.

MEN 3 -- Finalize Menufiya WWC staffing plan

(Month 9). This activity was initiated ahead of schedule. WWSS HR staff are supporting the development of the staffing plan through a series of workshops and ongoing visits. The plan will be completed next quarter.

MEN 4 (See CC 11, 12, 13) -- Strengthen WWC finance department

(Months 2-12). No activities this quarter.

MEN 5 -- Implement warehouse management pilot program at Menufiya WWC

(Months 1-12). This task has been suspended; the project will focus on other high return activities.

MEN 6 -- Establish a meter repair workshop for Menufiya WWC

(Months 1-8, 11-12). As noted in our last report, tasks related to meter repair and customer service will be confined to UFW programs. In Menufiya, these activities will be reconsidered in the context of future UFW programs, possibly in Year 3.

MEN 7 -- Provide technical and on-the-job training for Menufiya GIS unit

(Months 2-6). This quarter, a copy of ArcGIS and ArcInfo was delivered to subsidiary staff, and OJT was provided in its installation. In addition, a copy of Water Cad and Sewer Cad was also delivered, and OJT was provided in its installation. Additional OJT was provided on avoiding errors in field surveys, digitizing maps from satellite images, and drawing, reading and correcting images and maps. Additional training was provided on linking GIS with the 125 hotline and a complaints location database.

MEN 8 -- Conduct audit of electricity and chemical use of Menufiya WWC

(Months 5-6). The chemical optimization activity, completed this quarter, resulted in a recommended reduction in both chlorine and alum dosages and a savings in raw alum of over 18%. The complete report is in production and will be published next quarter. The energy use analysis revealed a power factor of 80%, which results in fines for the WWC. With a corrective panel, the company could increase the power factor out of the penalty range, and enjoy annual savings of approximately 40,000 EGP. We are in the process of purchasing a correction panel for this purpose, as well as an analyzer for the company so that they can replicate this activity in other plants. The complete report from the electricity rationalization activity was published this quarter, and is available for download on the program website (www.egyptwwss.org).

MEN 9 -- Procure equipment for newly established Menufiya WWC PMU

(Months 3-5). Some equipment was delivered to the PMU this quarter as part of the overall WWSS procurement, especially hardware and software (Water and Sewer CAD, MS Project, GIS software), and the rest is expected to be delivered next quarter. See PDC 5 for more details on the status of procurement.

MEN 10 (See CC 14, 15, 16, 17) -- Support the establishment of the Menufiya WWC PMU

(Months 5, 6, 9). During this quarter, WWSS provided training on project chartering and contracting in April, described in HC10, and on hydraulic modeling, described in CC15.

Beni Suef Water and Wastewater Company

BEN 1 -- Propose a new organizational structure for the HR sector (*Month 5*). A draft organization structure has been completed, using guidance and samples provided by WWSS. Ongoing assistance has also been provided in developing the HR plan (see CC 5). The task is now complete, but additional support will be provided, as detailed in Section 5 below.

BEN 2 -- Develop inventory management procedures (*Months 6-8*). This task has been suspended and we are re-programming its resources to other higher-yielding activities. We remain available to assist the WWC with inventory management on an as-needed basis.

BEN 3 -- Improve utilization of central laboratory (*Months 1-6*). Ongoing support was provided to the Beni Suef central lab, including: development of sample SOPs for physical and chemical analysis; and ongoing training on counting algae and microscopic examination procedures. Such recommended procedures are currently being compiled into a Lab Procedures Manual, to be published and disseminated next quarter in parallel with ongoing lab activities, described below in Section 5. Additionally, the WWSS Laboratory Specialist facilitated knowledge sharing between the lab chemists in Beni Suef, Sohag, and Minya.

Minya Water and Wastewater Company

MIN 1 -- Propose a new organizational structure for the HRD section (*Month 6*). A draft organization structure was completed, using guidance and samples provided by WWSS in the HR workshop (see CC 5). The task is now complete, but ongoing support will be provided, as detailed in Section 5 below.

MIN 2 -- Develop inventory management procedures (*Months 6-8*). This task has been suspended and we are re-programming its resources to other, higher-yielding activities. We remain available to assist the WWC with inventory management on an as-needed basis.

MIN 3 -- Conduct an audit of chemical and electricity use (*Months 2-3*). Both the chemical and energy studies were completed in the previous quarter, and the reports were published this quarter and are available for download on the program website (www.egyptwwss.org). The total projected savings for the Kedwan WTP from the chemical use rationalization activities is LE 130,000, and the energy use rationalization activity projected an additional LE 90,000 in savings.

MIN 4 -- Replicate implementation of JICA-developed standard operating procedures (SOPs) (*Months 3-7*). As reported last quarter, we completed draft SOPs for the Kedwan Water Treatment plant, based on the JICA model. To supplement the SOPs, we worked this quarter on development simple, graphic, poster-size operating instructions for day-to-day use in the plants. For each plant, we will print multiple copies of the laminated work instructions and also provide copies of the corresponding files on CD for back-up purposes. In year three, we plan to produce a manual on the development of operating instructions and conduct related workshops to enable WWCs to produce similar posters for their other water and wastewater treatment plants.

MIN 5 -- Improve utilization of central laboratory (*Months 1-6*). Ongoing support was provided to the Minya central lab, including: development of sample SOPs for physical and chemical analysis; and ongoing training on counting algae and microscopic examination procedures. Such recommended procedures are currently being compiled into a Lab Procedures Manual, to be published and disseminated next quarter. Additionally, the WWSS Laboratory Specialist facilitated knowledge sharing between the lab chemists in Beni Suef, Sohag, and Minya; developed a maintenance contract for the ongoing maintenance of the central lab; and trained two chemists on absorption, heavy metals analysis and organic material analysis.

Aswan Water and Wastewater Company

ASW 1 -- Provide recommendations for Aswan WWC Planning Unit and PMU on integration (*Months 1-2*). This task has been completed, as reported last quarter.

ASW 2 (See CC 14) -- Establish Aswan WWC PMU (*Months 2-12*). The establishment of the PMU was approved and the decree was signed by the utility Chairman. As part of the overall WWSS procurement, they received a portion of their computers, and the remaining items will be delivered in the upcoming quarter. Utility staff participated in the April project chartering and contracting workshop described in HC10.

Qena Water and Wastewater Company

QEN 1 (See CC 1) -- Develop the business plan (*Months 6-12*). The Qena WWC's draft business plan was completed in May, in close cooperation with the GTZ team there. Additional details on the business planning process are contained in CC1.

QEN 2 (See CC 14, 15, 16, 17) -- Provide training and technical assistance in project management (*Months 4, 6-8*). Qena utility staff participated in the PRiSM support and OJT activities described in CC14. In addition, they attended the chartering and contracting workshop described in HC10.



Qena business planning workshop

QEN 3 -- Perform program management responsibilities (*Months 3-12*). As described above in CC 14, the WWSS program management team provided considerable hands-on support on the use of PRiSM to manage ongoing projects. Drawing upon the data in PRiSM, the WWSS team prepared a report for the utility showing the status of projects within the governorate.

Matrouh Water and Wastewater Company

MAT 1 (See CC 1) -- Develop the business plan (*Months 7-12*). Business planning activities were initiated this quarter at a June kickoff workshop, which was attended by representatives from the Luxor and Giza business planning units. The draft business plan will be completed next quarter. Additional details on the overall business planning process are contained in CC 1.

MAT 2 -- Revitalize USAID-supported asset management IT system (*Months 5-8*). The asset management department was established, following the Matrouh Chairman's decree, and staff have been hired. The WWSS MIS Specialist worked closely with these staff to install the USAID-supported asset management system and provide training.

MAT 3 (See CC 14, 15, 16, 17) -- Provide technical assistance to project management staff (*Months 3-9*). Matrouh utility staff participated in the PRiSM support and OJT activities described in CC14, and the CIP training described in CC15. In addition, they attended the chartering and contracting workshop described in HC10.

MAT 4 -- Provide technical assistance in managing one construction project (*Months 3, 4, 6, 8, 11*). This task was canceled, as we were unable to find a suitable location. It has been replaced with the construction management project in Menufiya (see Section 5, below).

MAT 5 -- Assist in implementation of procured hand-held units (*Month 3*). This subsidiary-led activity did not require the anticipated input from the WWSS team. The Company has procured the equipment and is implementing the program independently.

MAT 6 -- Provide OJT in implementation of procured O&M management software (*Months 3-4*). Rather than assist in the implementation of a procured system, it was decided instead to provide the Matrouh WWC with the CMMS system developed by WWSS. This will be installed in the upcoming quarter.

Cairo Water Company

CAI 1 -- Identify optimal computerized inventory control and management system (*Months 2-5, 10*). After an initial assessment of CWC's inventory management system, WWSS suspended this task pending the utility's trial of the ADVAC inventory management software. Should further analysis be necessary, we remain ready to assist.

CAI 2 -- Assist in implementation of procured O&M management software (*Months 8-10*). CWC has previously acquired the MP2 O&M management system, which is a highly complex maintenance management. Their current version is outdated, and upgrades are costly. After testing the WWSS-developed CMMS at the Gezirat Al-Dahab WTP in Giza, we are currently rolling it out in additional governorates, including Cairo.

CAI 3 -- Involve CWC personnel in cross-cutting activities (*Months 2-12*). CWC participated in WWSS-supported workshops including the HR planning workshop, and the project chartering and contracting workshop. Additionally, a CWC representative will participate in the second US observational study tentatively scheduled for September.

Daqahliya Water and Wastewater Company

DAQ 1 -- Using a local qualified firm, perform construction management services for one project (*Months 6, 8, 11*). This task was canceled, as we were unable to find a suitable location for a project. It has been replaced with a construction management project in Sohag (See Section 5 below).

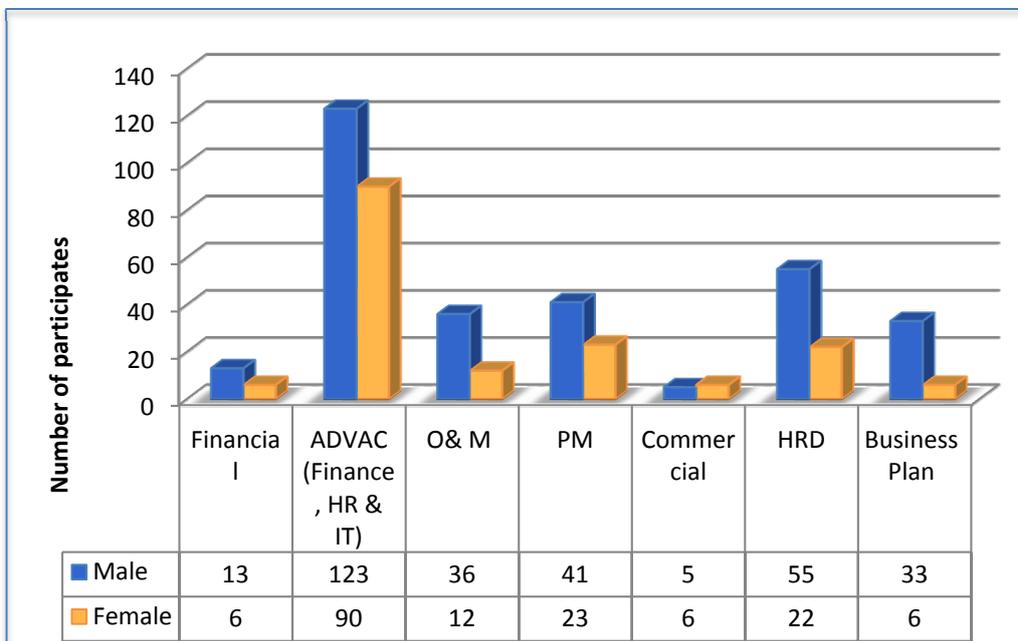
DAQ 2 -- Roll out cross-cutting capital investment planning and program management activities (*Months 6-12*). Daqahliya participated in several cross-cutting activities including on-the-job training in support of the PRiSM program, and they participated in the April workshop on project chartering and budgeting described in HC10.

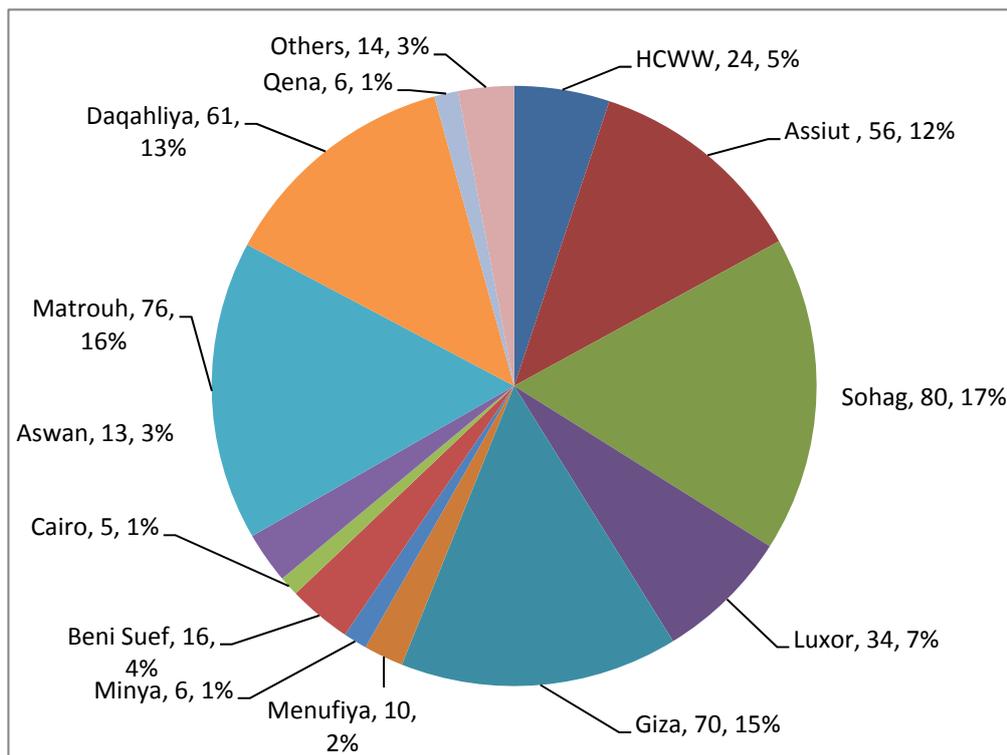
4. Component D: Program Development and Coordination Activities

PDC 1 -- Plan and coordinate field trips and trip reporting (*Months 1-12*). Latest field trip reports and schedules are regularly updated on the WWSS website, at the following address: <http://www.egyptwwss.org/inner.php?IdC=1&IdS=1>. Though more HCWW is still desired, we experienced an increase in HCWW attendance at field activities during this quarter.

PDC 2 -- Plan, monitor, and report training activities (*Months 1-12*). WWSS refines its training plan on a monthly basis in parallel with our monthly trip schedule, taking into account program requirements and recently identified needs. Our approach to training planning, management, and evaluation is standard – course materials for each course include presentations and trainee materials, and standardized attendance and evaluation forms are used for monitoring purposes. The following two tables show the number of trainees trained by WWSS according to subsidiary, and by functional area, during this quarter:

WWSS Training by Functional Area and Gender, April – June, 2010



WWSS Training Participants by Company, April – June, 2010

PDC 3 -- Monitor, evaluate, and report program progress (*Months 1-12*). The WWSS team was active this quarter in collecting and communicating results of program activities. Based on the results of the Luxor UFW pilot and the chemical optimization activities, two USAID-format success stories were published. Additionally, project achievements were collected and presented to the USAID Mission Director in early June, and six abstracts have been accepted for presentation at the upcoming International Sustainable Water and Wastewater Services Conference hosted by the HCWW on July 25-27.

The program PMP was completed and approved this quarter, in cooperation with the WPRR project. Baseline data collection for program indicators has begun, and a complete set of baselines and targets will be submitted to USAID on or about September 30.

Finally, as outlined in the PMP, we will begin next quarter to develop an annual subsidiary assessment aiming to assess application and impact of skills gained through project training and technical assistance at the subsidiary level.

PDC 4 -- Design and launch a WWSS program intranet site (*Months 1-4*). Following last quarter's launch of the program website, secured access was given this quarter to all counterparts at the HCWW and to cooperating donor projects (USAID WPRR, GTZ, FaDWaSP, and UNICEF). All deliverables to date have been uploaded, and other content additions include field trip schedules, success stories, and subsidiary fact sheets. The site will continue to be used as a communication tool between key program partners for sharing up-to-date project information. View all recent updates at www.egyptwss.org (password: wwss4all).

PDC 5 -- Finalize and implement WWSS Phase I procurement plan (*Months 1-2*). The procurement list was finalized and approved. Local and US-based procurement batches were determined based on contractual and regulatory requirements, as well as local availability, price, and speed of delivery. For the IT hardware and software procurement, WWSS requested and received from USAID/Washington's Chief Information Office the Automated Directives System 548 approval needed to award contracts to vendors. The IT batch being procured locally was delivered to the HCWW and WWCs, along with some non-IT equipment.

A list of deliveries made to date is included below. The IT equipment procured from the US, with the exception of 24 work stations, arrived and cleared customs at the end of the quarter, and will be distributed to the subsidiaries next quarter.

List of Delivered Properties up to 30 June, 2010

Sr.	Type	Property	Subsidiary Companies	Date
1	NB	Laptop	HCWW	No date
2	SW	ARC View (GIS) 9.3	Menufiya	11.11.2009
3	SW	ARC View (GIS) 9.3	Sohag	3.8.2009
4	SW	ARC View (GIS) 9.3	Assiut	1.6.2009
5	SW	ARC View (GIS) 9.3	Luxor	25.6.2009
6	PC	One PC with accessories	Menufiya	22.2.2010
7	SW	MS Office Project 2007	Menufiya	22.2.2010
8	PC	One PC with accessories	Giza	23.2.2010
9	SW	MS Office Project 2007	Giza	23.2.2010
10	PC	One PC with accessories	Giza-Geziret el Dahab	23.2.2010
11	PhC	One Xerox photocopier 5638	HCWW	11.3.2010
12	SW	MS Office Project 2007	Daqahliya	22.3.2010
13	SW	ARC View (GIS) 9.3	Giza	24.3.2010
14	PhC	Two (2) Xerox photocopiers 5638	Luxor	22.3.2010
15	PhC	Two (2) Xerox photocopiers 5638	Menufiya	22.3.2010
16	SW	10 ADVAC Financial & HR SW Licenses	Matrouh	22.3.2010
17	SW	MS Office Project 2007	Matrouh	22.3.2010
18	PhC	One Xerox photocopier 5638	Giza	24.3.2010
19	SW	MS Office Project 2007	Beni Suef	25.3.2010
20	Printer	HP Laser jet 1005	Giza	30.3.2010
21	PhC	Xerox photocopier 5645	Assiut	13.4.2010
22	SW	10 ADVAC Financial & HR SW Licenses	Assiut	19.4.2010
23	SW	Two (2) Water CAD & Sewer CAD Licenses	Luxor	27.4.2010
24	SW	Ten (10) ADVAC Financial & HR SW Licenses	Luxor	27.4.2010
25	SW	Two (2) Water CAD & Sewer CAD Licenses	Giza	2.5.2010
26	Equip	Three (3) Dura measuring wheels	Luxor	3.5.2010
27	Equip	Fifteen (15) Listening sticks	Luxor	3.5.2010
28	PhC	Two (2) Xerox photocopiers 5645	Sohag	3.5.2010
29	Pics	Seventeen (17) framed pictures	HCWW	9.5.2010
30	SW	ARC View ArcInfo 9.3	Sohag	11.5.2010
31	SW	Two (2) Water CAD & Sewer CAD Licenses	Sohag	11.5.2010
32	Printer	Two (2) HP Ink Jet Printers K 8600	HCWW	16.5.2010
33	Printer	Three (3) Printers HP Laser Jet 3015D	Giza	16.5.2010
34	Printer	One HP Ink Jet Printer K 8600	Giza	16.5.2010
35	Printer	One HP Ink Jet Printer K 8600	Menufiya	16.5.2010
36	SW	ARC View ArcInfo 9.3	Assiut	17.5.2010
37	SW	Two (2) Water CAD & Sewer CAD Licenses	Assiut	17.5.2010
38	SW	Two (2) Water CAD & Sewer CAD Licenses	Menufiya	24.5.2010

39	SW	ARC View ArcInfo 9.3	Menufiya	24.5.2010
40	Printer	One (1) Printer HP Laser Jet 3015D	Beni Suef	25.5.2010
41	Printer	Seven (7) Printers HP Laser Jet 3015D	Assiut	26.5.2010
42	Printer	One HP Ink Jet Printer K 8600	Assiut	26.5.2010
43	SW	ArcGIS ArcInfo 9.3	Giza	26.5.2010
44	Printer	Nine (9) Printers HP Laser Jet 3015D	Sohag	26.5.2010
45	Printer	One HP Ink Jet Printer K 8600	Sohag	26.5.2010
46	NB	Two (2) HP Elite Book 8530w, one Docking Station and one laptop Adapter	HCWW	27.5.2010
47	Printer	One (1) Printer HP Laser Jet 3015D	Minya	27.5.2010
48	Printer	One (1) Printer HP Laser Jet 3015D	Qena	30.5.2010
49	Printer	Four (4) HP Laser Jet 5200 TN	Assiut	3.6.2010
50	Printer	One Printer HP 3015D	Matrouh	6.6.2010
51	Printer	Two (2) Printers HP5200 TN	Matrouh	6.6.2010
52	Printer	One (1) Printer HP Laser Jet 3015D	Matrouh	7.6.2010
53	Printer	Two (2) Printers HP Laser Jet 5200 TN	Matrouh	7.6.2010
54	Printer	Two (2) Printers HP Laser Jet 5200 TN	Giza	9.6.2010
55	Printer	Six (6) Printers HP Laser Jet 5200 TN	Sohag	9.6.2010
56	Books	Seven (7) books on Sanitation and Construction Engineering of Water & Wastewater Sector	HCWW	10.6.2010
57	SW	Two (2) Water CAD & Sewer CAD Licenses	Matrouh	10.6.2010
58	Printer	Two (2) HP Laser Printer 5200 TN	Luxor	10.6.2010
59	Printer	One HP Ink Jet Printer K 8600	Luxor	10.6.2010
60	Printer	Five (5) HP 3015n	Luxor	10.6.2010
61	SW	ARC View (GIS) 9.3	Aswan	13.6.2010
62	Printer	Five (5) HP 3015D	Menufiya	29.6.2010
63	Printer	Two (2) HP Laser Printer 5200 TN	Menufiya	29.6.2010

5. Activities Implemented Beyond the Year 2 Work Plan

Our emphasis on high-impact/high-return activities, in some cases, has led us to take on activities beyond those laid out in our Year 2 Plan. When taking on such new activities, we use some of the following guidelines in order to gauge the potential impact/return of proposed activities:

- **Replicability of interventions:** both within the initially targeted utility and in other governorates, including the ability for interventions to be systematized and documented
- **Management buy-in:** including the presence of supporting leadership, management and staff within the utility, in addition to HCWW support and engagement
- **Service delivery impact:** intervention improves capacity of a utility to deliver quality service to its customers
- **Cost reduction and productivity impact:** intervention improves the capacity of the utility to reduce costs and raise productivity
- **Supporting systems and organizational structures:** Presence of management systems, along with organization charts and position descriptions, organizational competencies and procedures for follow-up and work planning, in order to create and sustain change.

In light of this framework, some of the following high-impact/high-return activities that WWSS is taking on beyond our second year plan include the following. We have added these tasks at the end of the WWSS Year 2 Activity Tracker, attached as an Annex to this document.

Beyond Y2WP 1 -- Business planning (see CC 1):

- *1.1 -- Business planning in additional subsidiaries.* In addition to the seven business plans underway according to the work plan, WWSS is planning to complete business plans in three additional governorates: Beni Suef, Aswan, and Minya. This activity was launched with a kickoff workshop in Aswan in June, and implementation will continue next quarter.
- *1.2 -- Establishing business planning units within subsidiaries.* As reported last quarter, we have submitted a recommendation to the HCWW to establish business planning units in all subsidiaries. With this recommendation, we have suggested a simple organizational structure, staffing recommendations, and draft position descriptions. We are still awaiting feedback on this request, but the HCWW has signaled their intention to initiate this activity in the near future. Upon the establishment of such units, we will consider allocating items from the procured IT equipment to the teams. The Qena WWC has proposed that its business planning unit operate as part of its planning department, and the Qena Chairman has verbally agreed to this.
- *1.3 -- Ongoing support and follow up on draft plans.* For the four subsidiaries completing draft business plans last quarter (Assiut, Luxor, Giza and Menufiya), we have continued to follow up to encourage plan finalization as well as broad buy-in throughout the subsidiary. This presents a challenge, and strong pressure from the central level is critical to transform a draft business plan into the official business plan of the subsidiary. For business planning to become a truly effective tool at the hands of the sector, the commitment driving forward the process will need to come from the leadership of the subsidiaries and their respective boards, with additional “pressure” perhaps from the HCWW. We are also facilitating inter-subsidiary communication and support to stimulate sharing of experience and learning opportunities.

Beyond Y2WP 2 -- ADVAC installation and training (see CC 13). In addition to installing ADVAC and providing training in five WWSS-targeted subsidiaries, we are undertaking the below activities. As a number of them involve subsidiaries outside of the scope of the WWSS program, we are working closely with HCWW to ensure familiarity with the ADVAC methodology to sustain the program in the future.

- *2.1 – ADVAC installation in Daqahliya:* We are working directly with Daqahliya WWC in implementing the three-phase ADVAC installation methodology (installation, operation, integration). This will be completed in the upcoming quarter.
- *2.2 – ADVAC installation in additional governorates.* For ADVAC installation at Alexandria Water, Red Sea, North and South Sinai, and Qalubiyah governorates, which are not included in the WWSS scope of work, we are putting these companies in touch with the ADVAC company directly. Cooperation will begin next quarter.
- *2.3 – Additional modules for WWSS-supported companies.* As mentioned in CC 13, we are purchasing the full ADVAC package for five WWSS-supported companies. In addition, for the other WWSS-supported companies, we are purchasing HR and/or payroll licenses to complement modules previously acquired independent of the program.
- *2.4 – IT support for ADVAC sustainability.* To ensure the security and sustainability of the newly-installed ADVAC system, we provided capacity building activities in the WWSS-supported governorates with support for IT departments of subsidiaries that are using ADVAC. In Assiut, Sohag, and Matrouh, we provided on-the-job training on network security and risk assessment, and on preventative maintenance planning and hardware backup planning. Additionally, in all of the ADVAC-supported companies, we provided assistance with database administration.

Beyond Y2WP 3 -- Support for subsidiary HR departments (see CC 5, SOH 2, AST 2, 3, LUX 3, GIZ 2, MEN 2 and 3, BEN 1, MIN 1). Our Year 2 work plan called for support for subsidiaries in launching HR departments, and in developing subsidiary HR plans. These activities are nearing completion, but WWSS continues to be involved with subsidiary HR departments as HR plans are launched, and as HR departments begin to play an integrated role in the ongoing activities of subsidiaries. Below we highlight HR activities ongoing within WWSS beyond our Y2WP:

- *3.1 -- Establish HR departments in additional governorates.* We initiated an activity related to creating an HR department in four additional subsidiaries: Luxor, Beni Suef, Minya and Giza, and it will be completed next quarter.
- *3.2 – Developing HR plans in additional governorates:* In addition to Sohag, Assiut, Luxor, Giza, and Menufiya, outlined in our work plan, we have supported companies in Qena, Aswan, Matrouh, Cairo, Beni Suef and Minya in developing their HR plans, which include divisional organizational charts, functional descriptions, and job descriptions. See also CC 5.
- *3.3 – Assist Assiut WWC in developing an organizational chart.* Based on a request from the new Assiut WWC Chairman, WWSS developed a proposed organizational chart for the company. After examining the utility's current organizational chart, we proposed a new structure, including detailed organizational charts for each division, and presented it to the Chairman in May. Based on feedback from the company, we continue to revise it, and the latest draft was submitted to the company in June.

Beyond Y2WP 4 -- UFW program expansion (See LUX 1): Building on the Luxor pilot experience, we are currently expanding the program in Luxor and replicating it elsewhere. To further promote and sustain this activity, we are currently developing manuals and TOT materials for future roll-out of similar activities.

- *4.1 -- Rollout of UFW activities in Luxor City.* Upon completion of the pilot report, we assessed potential locations for roll-out in Luxor. After a mapping exercise, we selected 5 of 19 zones within Luxor City for the roll-out. Further activities are pending the WWC's completion of the activities agreed upon in the Memorandum of Understanding, including allocation of staff, facilities, equipment, and transport to the effort.
- *4.2 -- UFW Replication in Assiut and Sohag.* WWSS trained the WWCs on use of the water balance analysis tool, and we are working with the Sohag company to collect data for the analysis. In Assiut, we were able to estimate the water balance and discovered UFW of over 50% in Assiut district, most of which (over 40%) is through physical losses. To initiate the UFW program, we are delineating the

pilot areas, mapping the network and connections, generating work orders for required network maintenance, and monitoring the delivery of leak detection equipment.

Beyond Y2WP 5 -- CMMS roll-out in additional treatment plants. After testing the WWSS-developed Computerized Maintenance Management System (CMMS) in two plants, Gezirat Al-Dahab in Giza and Sennoures in Fayoum, we initiated rollout to four additional governorates - Sohag, Assiut, Beni Suef, and Minya. In cooperation with our colleagues at FaDWaSP, we assisted in training maintenance engineers from each company, and drafted user and administrator manuals. Once the manuals are complete, further assistance will be provided to these and other companies to install and operate the system.

Beyond Y2WP 6 -- Construction management projects in additional utilities (See AST 15, DAQ1). Our Y2WP called for assistance with construction management plans in Assiut (AST 15) and Daqahliya (DAQ 1). The program in Assiut is moving forward; we were unable to identify a suitable location in Daqahliya, and this task has been moved to Sohag. In addition, we have taken on a construction management in an additional governorate, Menufiya

- *6.1 -- Sohag construction management project.* We have replaced the activity intended for Daqahliya with the equivalent project in Sohag. We are in discussions with the Swiss Embassy concerning the potential project in Sohag. We developed and presented a concept paper to the Swiss Embassy, HCWW, and the Sohag WWC, and are awaiting concurrence. Once received, we will agree on a protocol and prepare an MOU detailing roles and responsibilities, before selecting a construction management firm.
- *6.2 -- Menufiya construction management project.* With agreement from our counterparts at the Menufiya WWC, we have selected a project in the village Adnan in Sadat City. Next quarter, we will proceed to develop an MOU, agree on roles and responsibilities, and select a construction management firm.

Beyond Y2WP 7 -- Energy rationalization in additional governorates. In addition to Minya and Menufiya, included in the Year 2 work plan, we added Giza, Aswan, Assiut, Beni Suef, Sohag, and Matrouh to the energy rationalization activity, for a total of eight governorates. The audit is complete in all cases, and the reports are in production. We are purchasing analyzers for each of the eight companies and plan on acquiring power factor correction panels for each pilot plant. This program will expand to include all WWSS-supported companies by mid-November. We are also developing a manual and TOT materials to build a cadre of trainers in the subject and aid in replication of this activity in the future.

In addition, we are cooperating with HCWW on establishing a control unit trained on how to analyze power factor, to aid in future replication of this activity, and equip them with analyzers.

Beyond Y2WP 8 -- Chemical optimization in additional governorates. The WWSS Y2WP called for chemical optimization activities in Minya and Menufiya, and we have added six more governorates to the program. In Giza, Sohag, and Assiut, we completed the activity, and we will do so in Beni Suef, Aswan and Matrouh next quarter. We will then expand the program to cover all WWSS-supported companies by mid-November. In addition, we are preparing manuals and TOT modules on the topic to sustain this activity in the sector.

Beyond Y2WP 9 -- Activating cost accounting departments in select subsidiaries. At the request of the HCWW, we are working closely with them to activate cost accounting departments in select subsidiaries. After a joint planning meeting with the HCWW, the WWSS team initiated activities in Matrouh, Sohag and Assiut, after which we will support Luxor. For each company, assistance will include:

- Establishing the cost accounting units within company along with position descriptions
- Developing cost accounting ledgers and workflow procedures
- Defining the relationship between the cost accounting department and the other departments
- Providing training on cost accounting procedures for the following departments:
 - Cost Accounting

- Inventory Control
- Human Resources (Payroll)
- Implement automated general ledger, cost accounting, HR, and inventory control systems, and train users on the automated system

Beyond Y2WP 10 – Development of standard documents for O&M and indefinite quantity contracting. In addition to the standard contracting documents list in our contract and work plan, the Holding Company has requested similar assistance in two additional areas: O&M contracting and indefinite quantity contracting (IQC). Both activities are aimed at improving the speed and quality with which subsidiaries enter into contracts for services and rehabilitation works. Draft O&M contracting documents for wastewater treatment plants and the draft IQC manual and guidelines were submitted to the HCWW for review in June. Based on the comments received, we will revise and then distribute the documents to subsidiary companies during training workshops.

Beyond Y2WP 11 (see CC 8) – Development of O&M plans and budget in additional subsidiaries. In addition to the O&M planning and budgeting in Sohag and Assiut, outlined in the Year 2 work plan, we are working closely with WWCs in Giza, Luxor, and Menufiya. The Giza WWC was the first company to complete their plan this quarter, and Luxor and Menufiya are 60% and 80% complete, respectively. Additionally, as described above, we intend to implement this activity with additional companies, starting with workshops next quarter.

ANNEX A: YEAR TWO WORK PLAN ACTIVITY TRACKER
