
**Audit of USAID/West Bank and Gaza's
Water Activities**

**Report No. 6-294-99-002-P
February 2, 1999**

Regional Inspector General for Audit

Cairo, Egypt



CAIRO, EGYPT

**UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL DEVELOPMENT
OFFICE OF THE REGIONAL INSPECTOR GENERAL/AUDIT**

Report No. 6-294-99-002-P
February 2, 1999

MEMORANDUM

TO: USAID/West Bank and Gaza Director, Christopher D. Crowley

FROM: RIG/A/Cairo, Darryl T. Burris *D. Burris*

SUBJECT: Audit of USAID/West Bank and Gaza's Water Activities.

This is our final report on the subject audit. In finalizing the report, we considered your comments on the draft report and modified the report as we considered appropriate. Your comments on the draft report are included in Appendix II.

This report contains five recommendations for your action. Based on the information provided by the Mission, we consider that a management decision has been reached on Recommendations 1, 2, 4 and 5. A determination of final action for these recommendations will be made by the Office of Management Planning and Innovation (M/MPI/MIC) when planned corrective actions are completed.

We do not consider that a management decision has been reached on Recommendation No. 3. Please notify our office within 30 days of actions planned or taken to implement Recommendation No. 3.

I appreciate the cooperation and courtesies extended to my staff during the audit.

Enclosure: a/s

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EXECUTIVE SUMMARY

In September 1993, the Palestinian Liberation Organization and the Government of Israel signed an agreement envisioning the transfer of self-rule authority to the Palestinians, initially over the Gaza Strip and Jericho and later over the remainder of the West Bank. In recognition of this historic opportunity, the United States committed to provide \$500 million over a five-year period to support the peace process.

In September 1995, the Palestinians and Israelis signed the Oslo II Accords which extended Palestinian self-rule to six major population centers in the West Bank, with a phased-in extension of authority planned for other areas. The United States government viewed water as both a high political and development priority during the Oslo II negotiations, and for this reason made broad commitments to play a lead role in increasing Palestinian access to water. Based on the importance attached to water and the U.S. commitments, USAID/West Bank and Gaza made water a strategic focus, committing 60 to 70 percent of its budget to its strategic objective on access to and use of water resources.

This audit examined the Mission's implementation of its planning and performance measurement systems for its water activities, and whether these activities were making satisfactory progress.

We concluded that the Mission generally implemented planning and performance measurement systems in accordance with Agency directives—except that the performance measurement system was structured to capture changes for the whole of the West Bank and Gaza when reliable data is not yet available at that broad scale. As a result, the Mission has placed itself in a position of presently not having reliable data to support many of its baselines, results and targets (page 4). We also found that the Mission's supporting documentation was not organized in a manner to permit easy tracing of the numbers to their specific support (page 15).

We recommended that the Mission clarify performance indicator definitions and establish controls and plans to obtain reliable information for its baselines, results and targets. We also recommended that the Mission cross-index each number in its performance monitoring plan to where, specifically, the number can be found in the supporting documents.

In regard to whether the water activities were making satisfactory progress, the audit concluded that except for significant delays in the West Bank in drilling wells and constructing the related

facilities and water transmission systems, these activities were making satisfactory progress (page 17).

Projected delays of 15 to 25 months to complete major construction activities in the West Bank were due to a number of factors but especially to delayed issuance of permits by the Israeli authorities and changes made in order to obtain those permits. As a result of the delays and changes, the contract costs had increased by \$20.5 million. We did not make a recommendation since the delays were mostly beyond the Mission's control, and the Mission appeared to have resolved the earlier problems.

With regard to our assessment of the Mission's performance indicators, baselines, results and targets, the Mission was of the opinion that in several instances the report statements were not accurate or well stated. However, the Mission accepted the report as providing a detailed, independent assessment of how its indicators might be understood (or misunderstood) by non-Mission audiences and stated the report findings and recommendations will feed into the Mission's ongoing efforts to refine its performance monitoring plan. We reviewed the Mission's comments and changed the report as we considered appropriate.

The Mission accepted the remaining findings as presented. A summary of management's comments and our evaluation is presented after each finding (see pages 10 and 16) and following our answer to the second audit objective (see page 20). The full text of the Mission's comments is included in Appendix II.

Office of Inspector General

Office of Inspector General
February 2, 1999

INTRODUCTION

Background

USAID's Mission in the West Bank and Gaza was established in August 1994 following the "Declaration of Principles on Interim Self-Governing Arrangements" signed between the Palestinian Liberation Organization and the Government of Israel in September 1993. The agreement envisioned an initial transfer of authority over the Gaza Strip and Jericho to Palestinians, to be followed by the transfer of authority over the remainder of the West Bank.

In recognition of the historic opportunity presented by the peace process, the U.S. committed to provide \$500 million over a five-year period, of which \$375 million was to be administered by USAID. USAID's initial support following the agreement focused on the start-up of Palestinian Authority operations, high priority infrastructure, employment generation, and economic reactivation.

In September 1995, the Israelis and Palestinians signed an interim "Protocol Concerning Redeployment and Security Arrangements" (the Oslo II Accords), which extended Palestinian self-rule to six major population centers in the West Bank, with a phased-in extension of authority planned for other areas. Water was viewed as both a high political and development priority during the Oslo II negotiations and, as such, the United States government made broad commitments to play a lead role in supporting efforts to increase Palestinian access to water.

Based on the importance attached to water and the U.S. commitments, the Mission decided to make water a strategic focus, committing 60 to 70 percent of its budget to its present Strategic Objective No. 2: Greater Access to and More Effective Use of Scarce Water Resources. Furthermore, the Mission told us that for political and development reasons the Mission decided to finance wastewater and stormwater facilities in Gaza City, wells in the Eastern Aquifer of the West Bank, and bulk water transmission systems in the Bethlehem-Hebron and Jenin areas of the West Bank.

The work in Gaza City was financed under the Mission's Gaza Wastewater Project which was authorized in April 1995. Initially the project was implemented by the United Nations Relief and Works Agency. However, since June 1996 the primary implementing entity has been the

contractor Metcalf & Eddy International, Inc. Metcalf & Eddy has two contracts totalling \$34.1 million under the project to provide complete project management services for the rehabilitation, expansion, and development of the existing wastewater and stormwater systems in Gaza City. Additionally, Metcalf & Eddy was awarded a third contract for \$6.2 million under a different project to build a reverse osmosis desalination plant in the Gaza Strip.

The work in the West Bank has been financed mainly under the Water Resources Program¹ authorized in September 1995, but secondarily under a USAID/Washington grant signed in September 1994. Grants have been awarded to the United Nations Development Program and to three nongovernmental organizations, mainly for activities to rehabilitate and extend water distribution systems in municipalities and villages. However, the main activities are implemented through Camp Dresser & McKee International, Inc. Camp Dresser & McKee has a \$67.7 million contract to provide complete project management services for a balanced water resources program with the main construction activities taking place in the Bethlehem-Hebron and Jenin areas.

The above activities are managed by USAID/West Bank and Gaza's Water Resources Office, with assistance from other offices in the Mission. As of July 13, 1998, the combined total obligations and expenditures for those activities was \$137.1 million and \$40.5 million, respectively.

Furthermore, at the time of our audit the Mission was planning the next phase of its water activities to be implemented over the upcoming five-year period. Draft concept papers indicated that \$145 million would be requested for West Bank activities and \$56 million for activities in the Gaza Strip.

Effective October 1, 1995, the Agency began using Automated Directive System chapters 201 through 203 which outline a "re-engineered" planning and performance measurement system. The system requires USAID missions to develop strategic plans, establish annual targets, and report annually on the results achieved in a document called the "results review and resource request" or R4. The re-engineered system is designed to focus management attention on results while permitting USAID personnel considerable flexibility to choose the most appropriate means of achieving planned results. The system is also designed to help meet the requirements of the Government Performance and Results Act of 1993, a law which requires Federal agencies to prepare strategic plans, establish performance indicators, and report annually on their performance in achieving planned results.

¹Formerly called the Municipal Services Project

Audit Objectives

The Office of the Regional Inspector General for Audit/Cairo conducted an audit of USAID/West Bank and Gaza's Strategic Objective No. 2: Greater Access to and More Effective Use of Scarce Water Resources, to answer the following audit objectives:

- Did USAID/West Bank and Gaza, for its water activities, implement planning and performance measurement systems in accordance with Agency directives?
- Were USAID/West Bank and Gaza's water activities making satisfactory progress?

Appendix I describes the audit's scope and methodology.

REPORT OF AUDIT FINDINGS

Did USAID/West Bank and Gaza, for its water activities, implement planning and performance measurement systems in accordance with Agency directives?

Except for problems introduced as a result of structuring its performance measurement system to capture data on a very broad scale, USAID/West Bank and Gaza, for its water activities, generally implemented planning and performance measurement systems in accordance with Agency directives.

Following its approved strategic plan, as modified during subsequent R4 submissions, the Mission defined a results framework and established a performance monitoring plan. A strategic objective team was created to manage water activities. Also, the Mission established mechanisms to collect data on a regular basis. These aspects were in accordance with Agency directives.

However, as a result of structuring its performance measurement systems to capture changes for the whole of the West Bank and the Gaza Strip without having reliable information on that broad a scale, the Mission has placed itself in a position of presently not having reliable data to support many of its baselines, results and targets. Further, the Mission's supporting documentation was not organized in a manner to permit easy tracing of the numbers to their specific support.

Indicator Definitions, Baselines, 1997 Results and Year 2000 Targets

The Agency's managing-for-results process revolves around defining a strategy to accomplish an objective, selecting appropriate and unambiguous indicators to measure performance, obtaining reliable data on the baseline conditions and annual results, and setting targets for future results based on careful analysis of what is realistic to achieve. However, in reviewing the basis for the Mission's R4 report to USAID/Washington in 1998, we concluded that most indicators of performance needed clarification, and most baselines, reported annual results and outyear targets were not supported with reliable information (see Appendix III). The root cause of this situation appears to be the overly broad scope of activities the Mission is attempting to capture and the fact that reliable information is not yet available on such a broad scale. The Mission stated that

it interprets Agency guidance and was advised by Washington design teams to capture results on a sector-wide basis. While the Mission's R4 clearly indicates that there are problems with the reliability of the information being reported, we believe that the problems are extensive and a greater effort on the part of the Mission is needed to resolve them.

Recommendation No. 1: We recommend that USAID/West Bank and Gaza, for its water resources strategic objective, clarify, as appropriate, what each indicator is supposed to measure (see Appendix III).

Recommendation No. 2: We recommend that USAID/West Bank and Gaza, for strategic objective indicator 1—the main strategic level indicator—develop a plan of action for obtaining reliable data; the plan may consider alternate methods of obtaining reliable data for the whole of West Bank and Gaza (such as statistical samples) or, alternatively, the indicator itself may be changed to something for which reliable data can be more readily obtained.

Recommendation No. 3: We recommend that USAID/West Bank and Gaza establish a control which requires: (1) the analysis of reports received from the Mission's contractors and other sources to identify water activities funded by other donors or by the Palestinians themselves which might contribute to results being reported under the Mission's performance indicators; and (2) visits to the activities identified to assess whether and when the activities are expected to produce results that should be reflected in the Mission's managing-for-results framework.

Recommendation No. 4: We recommend that USAID/West Bank and Gaza develop a plan of action to ensure that by the earliest date practical the Palestinian Water Authority's management information system captures reliable and consistent data on water activities for the whole of the West Bank and Gaza. Also, to the extent the Mission plans to use this system as the basis for its reporting, the Mission should ensure that its performance indicators are consistent with the information being captured by the system.

USAID's Automated Directives System (ADS) chapters 201 through 203 provide guidance on managing for results. Additionally, Performance Monitoring and Evaluation TIPS from USAID's Center for Development Information and Evaluation (CDIE) serve as supplementary references for ADS chapter 203.

USAID's managing-for-results system revolves around defining a strategy to accomplish an objective, selecting appropriate and unambiguous performance indicators, obtaining reliable data on the baseline conditions and results, and setting performance targets based on careful analysis of what is realistic to achieve.

In reviewing the basis for information included in the Mission's 1998 R4 report on its water resources strategic objective, we concluded that most indicators of performance needed clarification, and that most baselines, annual results and outyear targets were not supported with reliable information (see Appendix III for details). Following are a few examples:

Indicators

CDIE TIPS number 7 states: "Each performance indicator needs a detailed definition. Be precise about all technical elements of the indicator statement....The definition should be detailed enough to ensure that different people at different times, given the task of collecting data for a given indicator, would collect identical types of data."

Of the nine performance indicators reported on in the Mission's 1998 R4 submission to Washington, we concluded that seven would benefit from further clarification. For example, the main strategic objective level indicator is "Domestic consumption rate (metered)" and the indicator description is "Based on overall domestic supply (minus physical losses and unaccounted-for use) and population estimates". The scope of this indicator is so broad that there is significant risk of not gathering consistent information from year to year unless the indicator is precisely defined. To illustrate, we analyzed the support for the indicator's baseline and, after doing so, were not sure what the indicator included versus what it excluded. For example, the baseline value was a calculation made by the Mission's contractor, but the Mission did not have enough detail for us to assess whether the value includes only metered consumption.

Other consistency issues for this indicator were that the Mission told us that, due to political sensitivities, data for East Jerusalem was excluded from the calculation. However, an examination of the baseline data showed this was not so. We also noted that the baseline was for the whole of the West Bank and the Gaza Strip, but the 1997 results were based upon a nonstatistical sample of water utilities. The end result was a comparison not known to be statistically valid.

Baselines

A performance indicator's baseline is its value at the beginning of the planning period—ideally just prior to the implementation of the USAID program activities. Following approval of a mission's strategic plan, a mission is required to operationalize its performance monitoring systems and to validate, and modify if appropriate, the performance baselines initially defined in its strategic plan. Further, the ADS states that if data for a performance indicator prove to be unavailable, the indicator may need to be changed.

Our review found that six of nine baselines for performance indicators were not supported with reliable data.

The issue on certain of the baselines was both ambiguity about what should be measured by the indicator and lack of supporting information. For instance, the baseline value for the strategic

level indicator "Agricultural and commercial requirements met with nonpotable sources (percentage)" did not take into account untreated and poorly treated wastewater being used for agriculture. The Mission did not have information on the amounts of such wastewater being used and, in any case, did not intend to count the untreated wastewater being reused because it is environmentally unsound. While we understand and accept the Mission's position regarding environmental unsoundness, we still note that agricultural requirements are presently being met by this nonpotable water and are not reflected in the indicator's baseline. It is our understanding that one of the expected benefits of treating wastewater was to save or free up potable water for other uses. However, in this case, to the extent that more highly treated wastewater merely replaces untreated or poorly treated wastewater, no potable water is freed up for other uses.

An example of an indicator baseline of undetermined reliability is the Mission's performance indicator "Volume of losses prevented". The baseline for this indicator is very important as it was also used to calculate the baseline for the Mission's main strategic objective level indicator "Domestic consumption rate (metered)". The indicator measures the reduction in physical and administrative losses (e.g., inaccurate metering and illegal connections) from the domestic water supply systems of the West Bank and the Gaza Strip. The baseline value of 43 percent was supplied by the Mission's contractor and was based on estimates by water utilities or estimated from published data and/or discussions with water utility personnel. The reliability of these estimates and data was not determined.

Another point worth mentioning is that the Mission's original strategy planned to increase per capita consumption to a minimum standard, but data on per capita consumption is not being captured at this point. The Mission's strategic objective level indicator "Domestic consumption rate (metered)" actually reflects the amount of "accounted-for-water" per capita which is less than actual consumption because its calculation includes administrative losses which do not actually reduce the amounts being consumed.

1997 Results

The ADS requires missions to collect "actual results" data for each performance indicator, annually to the extent possible. Also, the ADS states that the information collected on development partners' programs must be at a level of detail and quality that ensures an accurate understanding of the progress being made.

With regard to reported 1997 results, the audit found that for most performance indicators the Mission reported results as zero, i.e., no results. We generally considered these "no results" situations to be not supported by reliable information because the Mission had not verified the actual situation.

For only one of the nine performance indicators did we conclude that the 1997 results were supported with reliable data.

Year 2000 Targets

CDIE TIPS number 8 states that all targets should be based on a careful analysis of what is realistic to achieve. Further, the ADS states that following approval of their strategic plans, missions are to operationalize their performance monitoring systems by, among other things, validating and/or modifying the targets initially defined in their strategic plans. Performance monitoring plans are to build on the initial information in the strategic plan verifying or modifying performance indicators, baselines and targets, and documenting decisions.

The ADS also requires that information and documentation required for managing the achievement of results be prepared, maintained and kept current.

We did not consider any of the Mission's Year 2000 targets to be supported. A basic problem was that the Mission did not maintain the documentation showing how it arrived at those targets. Further, based on the Mission's verbal explanations and other documents, we concluded that the targets generally lacked a reliable information basis, with lack of information on projects funded by other donors being a factor in many cases.

An example of a Year 2000 target without a reliable basis was the performance indicator for "Volume of losses prevented". This target is based on a contractor assumption that loss rates will be reduced over a twenty-year period as a result of the water supply system being upgraded and adequately maintained by well staffed and equipped utilities along with the necessary maintenance programs. This is just an assumption—not a realistic basis for projecting this indicator's Year 2000 target. Another example was the target for the indicator "Volume of water conserved". The Mission said that it had no specific plans that support the target. Rather, the target was picked based on the Mission's general expectation that other donors would focus on the area.

A third example illustrates that the Mission was not keeping close track of other donors' projects. For the indicator "Volume of additional potable water from conventional sources" we asked the Mission to identify the wells that correspond to its Year 2000 target of 23 million cubic meters of water per year. The Mission told us that when the target was formulated at the beginning of the strategy period, the specific wells had not yet been identified but that the program subsequently developed supports the target. The Mission then identified 13 wells, primarily USAID-funded ones, that would supply additional water in the range of the target value by the Year 2000. However, through other sources including contractor reporting to the Mission on other donors' activities, we noted references to at least 15 additional wells beyond those identified by the Mission. In addition there were a number of other activities such as wells being rehabilitated which would add results to this indicator but which the Mission did not mention. We assume someone in the Mission was aware of these activities since most of them were referred to in reports and newsletters from the Mission's contractor. However, the Mission's target does not include them.

The Mission told us that it structured its managing-for-results system as it did based both on its interpretation of ADS guidance and discussions with Washington design teams that it should capture sector-wide results. Additionally, the Mission has been candid in stating that there are problems with the reliability of the information being reported in the R4. For instance, its 1998 R4 states that reliable and complete water sector data have not been available for the West Bank and Gaza.

To partially address the problems of incomplete and unreliable data, the Mission has been supporting the development of a management information system (MIS) by the Palestinian Water Authority (PWA). For the last two years the Mission's main water contractor has assisted the PWA in annual data gathering exercises whereby survey questionnaires are sent to a number of water utilities. The Mission's intent is that the information collected will both serve the PWA's management purposes and be used in the Mission's results reporting.

In its 1998 R4, the Mission stated that it expects that this year's data gathering exercise will result in more reliable data. However, we found that improvements are needed. The Mission's contractor told us that a greater and continuous effort needs to be made to work with the water utilities reporting the information to the PWA.

In order to set realistic targets for sector-wide results as well as to provide a basis for cross-checking the reliability of information being reported in the PWA MIS, we also believe that the Mission needs information on the programs funded by other donors and the Palestinians themselves.

We noted that the Mission has tasked its main water contractor to stay abreast of activities in the water sector and to report those activities. However, while the reporting is taking place and the contractor seems to be making a reasonable effort to keep abreast of the water sector activities of other donors and the Palestinians themselves, we did not see that the reports were being analyzed by the Mission to assure that such activities are reflected in the Mission's results reporting and target setting. Therefore, this is another area where improvements are needed.

Conclusion

As a result of structuring its managing-for-results system to capture sector-wide results before reliable information is available at that broad scale, the Mission has placed itself in a position of not having reliable data to support many of its baselines, results, and targets. To its credit, the Mission has been open about reliability problems with the information being reported to Washington, and the Mission is supporting the PWA with the intent of improving the reliability of data over time. Nevertheless, our review indicates that there are various issues with regard to the ambiguity of the performance indicators themselves, questions regarding what went into the calculation of certain baselines, comparisons of inconsistent data, unsupported results, and targets without a documented basis. Many of these problems will not be solved as a result of the Mission's support for the PWA's MIS and therefore need separate Mission attention.

The Mission pointed out that its water resources strategy was launched based on political considerations to meet the immediate demands of the peace process, that the PWA was in a start-up mode at the time and still working out its relationships with water utilities, and that after decades of Israeli occupation there was a lack of available data for the West Bank and the Gaza Strip. The Mission stated that while the data sources were admittedly flawed at the time the Mission developed its strategic plan, it still felt that available information was sufficient to make reasoned decisions and order-of-magnitude estimates of the baseline condition, current and future needs, and potential accomplishments. The Mission further pointed out that it began to support the developing data collection and analysis efforts for the PWA's MIS.

The Mission stated that data will continue to be incomplete and imprecise for some time since some data still need to be developed and the establishment and refinement of related systems will be a time consuming process. Regardless, the Mission expects that the PWA's MIS, reports from the Mission's contractors and grantees, and information received from other donors on specific programs will provide increasingly reliable data for the Mission's performance monitoring and reporting during the period covered by its strategy.

We agree with the Mission's observations. However, we believe that the Mission needs to be more proactive in resolving the problems of lack of reliable data in the near term and, where it is not possible to get reliable data soon, it needs to seriously consider revising its indicators to something that can be reliably measured.

Management Comments and Our Evaluation

Although the Mission was of the opinion that certain of the facts/statements in the audit report were not accurate or well stated, it accepted the report as providing it a detailed, independent assessment of how its indicators might be understood/not understood by non-Mission audiences. It also stated that it expects that the report's findings and recommendations will feed into the Mission's ongoing efforts to refine the structure of its performance monitoring plan in the water sector and to determine the feasibility and utility of future data collection/analysis exercises. Based on the Mission's comments we modified the report as we considered appropriate.

The Mission disagreed with our conclusion that the root cause of the cited shortcomings in its performance monitoring plan was that the Mission scoped its performance indicators too broadly considering the fact that reliable data did not exist at that broad scale. The Mission considered the root cause to be the generalized absence of reliable data in the Palestinian territories following thirty years of Israeli occupation and the nascent nature of Palestinian partner organizations. The apparent difference between the two positions is that the Mission does not necessarily consider that its indicators are scoped too broadly despite the lack of reliable data.

The Mission further noted that its sector-wide strategic perspective and resultant inclusion of indicators covering the entire West Bank and Gaza were specifically consistent with the guidelines provided by an assistance team from the Bureau for Asia and the Near East (ANE

Bureau). However, it also noted that more recent communications from USAID/Washington seem to indicate that there is a recognition that such an approach may over-complicate performance measurement efforts.

The Mission also stated that it would not be practical to establish targets based on a detailed accounting of expected outputs and results of USAID, other donor and Palestinian implementation plans. However, nowhere in our report do we say how to establish the targets. Our main points are that however the targets are established their detailed basis should be documented so they can be evaluated for reasonableness and that some of the targets do not seem to square with current information and possibly should be adjusted.

While noting the Mission provided extensive comments and objected to various points presented in this audit finding, we also note that the Mission is considering various adjustments as a result of the audit. We recognize that ultimately it is the Mission, with approval of ANE Bureau, that must decide how to structure its results framework. We are presenting our independent observations regarding the Mission's present framework with the expectation that the Mission will seriously consider the audit report's information and make the appropriate decisions. We also wish to point out that we are not taking issue with events of the past. Rather, we believe that enough progress has occurred for the Mission to address the issues noted in the audit finding on a forward looking basis.

Our evaluation of the Mission's proposed actions in response to the four recommendations of the finding is provided below.

Recommendation No. 1: *We recommend that USAID/West Bank and Gaza, for its water resources strategic objective, clarify, as appropriate, what each indicator is supposed to measure (see Appendix III).*

Mission Position:

The Mission stated that, "In preparing its next R4, [it] will continue the process of refining its indicators, taking into consideration the suggestions and comments included in this audit report. Final decisions on such actions will be made in the context of USAID/W's review of the R4."

Our Evaluation:

As detailed in the Mission's response, the Mission will consider the possibility of narrowing the scope of some of its indicators, to capture USAID-specific impact only or perhaps including that of other **major** donor activities. Indicator-specific considerations are cited in the attachment to the Mission's reply. We consider that the Mission's proposed actions meet the intent of the recommendation.

Recommendation No. 2: *We recommend that USAID/West Bank and Gaza, for strategic objective indicator 1—the main strategic level indicator—develop a plan of action for obtaining reliable data; the plan may consider alternate methods of obtaining reliable data for the whole of West Bank and Gaza (such as statistical samples) or, alternatively, the indicator itself may be changed to something for which reliable data can be more readily obtained.*

Mission Position:

The Mission stated that it "already has a plan in place to provide incrementally better data as a tool for water resources management in the West Bank and Gaza. Included in these data will be acceptably reliable information on per capita consumption rates, although the definition of the indicator may be adjusted to reflect the MIS' less-than-total coverage of Palestinian users in the immediate term."

Our Evaluation:

The detail of the Mission's response indicates that the Mission may limit this indicator to the selected areas included in the Palestinian Water Authority's (PWA) annual survey done to gather information for the PWA's MIS. In the future, the Mission will continue to support development/refinement of the MIS, and—pending 100 percent survey coverage—use the resulting data for proxy indicators. The Mission stated this approach will be more useful and practical both in the short- and longer-term than the statistical sampling suggested in the audit recommendation. We consider the Mission's approach to scope the indicator to the survey coverage is responsive to the recommendation.

Recommendation No. 3: *We recommend that USAID/West Bank and Gaza establish a control which requires: (1) the analysis of reports received from the Mission's contractors and other sources to identify water activities funded by other donors or by the Palestinians themselves which might contribute to results being reported under the Mission's performance indicators; and (2) visits to the activities identified to assess whether and when the activities are expected to produce results that should be reflected in the Mission's managing-for-results framework.*

Mission Position:

The Mission stated that it believes "that the current level of interaction between donors is appropriate and effective, although USAID will continue to take the lead in improving donor coordination through targeted support to the PWA and active involvement in formal (sub) sector working groups. It would be of limited management utility to attempt to identify and quantify the impact of **all** prospective/planned/ongoing non-USAID water activities, and we cannot envision a viable "control" for such an effort. Instead, in conjunction with actions taken in response to Recommendation No. 1, the Mission might: refine indicators to include only USAID results, identify "major" other-donor activities to be included, and/or rely on sufficiently accurate data for selected but broad segments of the West Bank and Gaza as a sector-wide proxy."

Our Evaluation:

We do not consider the Mission's position responsive to the audit recommendation. The intent of the recommendation is only that the Mission establish a control, e.g., assign a specific responsibility to the SO2 team leader, to review the reports that it already receives under its contract with Camp Dresser and McKee (CDM) and which it will continue to receive under a new comprehensive contract for architecture and engineering services which the Mission expects to sign in Fiscal Year 1999. The purpose of the review would be to identify the activities of other donors and the Palestinians themselves which should be recognized in the Mission's results framework. Also, such information will help the Mission assess whether the information being reported by the PWA's MIS is reliable. There would be no need to take into account those non-USAID activities "scoped out" as a result of refining indicators.

Recommendation No. 4: We recommend that USAID/West Bank and Gaza develop a plan of action to ensure that by the earliest date practical the Palestinian Water Authority's management information system captures reliable and consistent data on water activities for the whole of the West Bank and Gaza. Also, to the extent the Mission plans to use this system as the basis for its reporting, the Mission should ensure that its performance indicators are consistent with the information being captured by the system.

Mission Position:

The Mission stated that it believes "that we currently have a feasible and effective plan in place to incrementally improve the data collection/analysis capacity within the PWA, to serve the PWA as a management tool and provide USAID with selected performance monitoring data. The extent to which USAID relies on this system for its internal reporting requirements will depend on the decisions taken relative to the previous recommendations, the success/shortfalls of immediate-term data collection efforts and consultations with USAID/W."

Our Evaluation:

The detail of the Mission's response indicates that Camp Dresser and McKee and the PWA have been working very closely with municipalities and utilities to complete a broader and more consistent survey for the PWA's 1998 MIS Report. The Mission expects that the 1998 MIS Report will be the best source of water data for the West Bank and Gaza available to date. However, it expects continuing difficulties in collecting reliable data. The Mission stated that its intent is to institutionalize the process of collecting reliable data within the PWA and that the Mission recognizes that a continuous effort will be required to accomplish this. However, it notes that the PWA has only one person working part time on this data collection effort. Other sections of the Mission's response also indicate that the Mission plans to scale back certain indicators as needed so that they are consistent with the data collected.

We consider that the Mission's planned actions to ensure that the Palestinian Water Authority's management information system will capture reliable and consistent data on water activities are responsive to the audit recommendation. However, it is not clear whether the Mission has assessed what remains to be done to ensure that this end is accomplished and how long it will be before data of the requisite reliability will be forthcoming to support the Mission's R4 reporting.

Maintaining Documentation for Review

ADS guidance requires that documentation for managing the achievement of results be prepared and maintained. Further, government internal control standards require that documentation be available and easily accessible for examination. In conducting our audit, we asked the Mission for supporting documentation for all baselines, results, and targets in its performance monitoring plan which directly supported its 1998 R4 submission for its water activities. However, while the Mission provided us its file supporting the performance monitoring plan and other planning documents, the support for many of the numbers was not readily apparent and we needed to do extensive review and analysis to determine the basis for the numbers. The audit process was considerably slowed as a result of the Mission not organizing its information to facilitate tracing the numbers to their specific support.

Recommendation No. 5: We recommend that USAID/West Bank and Gaza, for its water resources strategic objective, cross-index all baselines, results, targets and other figures in its performance monitoring plan to where they can be found within supporting documentation.

The ADS requires USAID managers to ensure that correspondence, reports, memoranda, and other information and documentation required for managing the achievement of strategic plans, objectives, results packages, activities, and agreements are prepared, issued, retained and kept current.

Additionally, United States government internal control standards require written evidence of all pertinent aspects of transactions and other significant events and that such documentation be available as well as easily accessible for examination.

In conducting our audit, we asked the Mission for supporting documentation for all baselines, results and targets in its performance monitoring plan which directly supported its 1998 R4 submission. In response, the Mission's program office gave us its file supporting the performance monitoring plan for the water resources strategic objective, and additionally we obtained the main planning documents for water activities developed by the Mission's contractors. However, the information was not organized in a fashion to make it easy to trace the specific support for the numbers cited in the plan. And, it was only after an extensive review and follow up with the Mission that we were able to determine the basis for the numbers and to conclude that most are not supported with reliable information (see Appendix III).

The Mission's program office personnel indicated that they considered that the performance monitoring plan adequately documents the basis for the information in the plan. Apparently they considered that it was sufficient to leave it to us to determine through analysis and follow-up

questioning which numbers (about 140 of them) were supported and by what². The point of the government internal control guidance, however, is that the information be organized and ready for review. While we were eventually able to determine the basis for most of the information, the process would have been greatly facilitated had the Mission cross-indexed the numbers to their specific support.

Further, we noted a few instances of the Mission inadvertently giving us mistaken information during interviews, not knowing the basis for a number in the performance monitoring plan, and not recalling information which would have more closely supported a number. Had the Mission noted the specific location of the support for the numbers in its performance monitoring plan, there would have been less opportunity for faulty recollection or not knowing the basis for a number.

Given the complexity of the Mission's managing-for-results framework established for its water resources strategic objective, the many numbers with different support, and the danger of relying on recollections rather than documentation, we believe it would be prudent for the Mission to cross-index each of the numbers in its performance monitoring plan to the specific location of the detailed support. This would facilitate future reviews of the validity of the baselines, results, targets and other supporting numbers.

Management Comments and Our Evaluation

The Mission agreed with the audit finding and recommendation. It stated that since figures cited to date were based largely on incomplete and unreliable sources, and targets were established based on order-of-magnitude assumptions, there have been limited citations to cross-index. However, it is expected that indicator definitions will be clarified, more consistent/reliable/detailed data will be available, and baselines will be finalized as the Mission's next R4 submission is prepared/approved. The Mission agreed that its future reporting will include detailed references to all data sources. We consider that the Mission's proposed actions are responsive to the audit recommendation.

²After the fact, they stated that to the extent it existed the specific support could be found in the Mission's strategy/R4, contractor reports or the performance monitoring plan itself. Otherwise, specific support did not exist because it was based on assumptions and order-of-magnitude estimates.

Were USAID/West Bank and Gaza's water activities making satisfactory progress?

Except for significant delays in starting construction in the West Bank, which we considered were largely beyond the Mission's control, USAID/West Bank and Gaza's water activities were making satisfactory progress.

Under the Gaza Wastewater Project, the prime contractor, Metcalf & Eddy International, Inc., appeared to be making satisfactory progress. The contractor had submitted a number of deliverables to the Mission including an inception report, master plan, feasibility studies and preliminary engineering designs for short- and long-term construction, awards for construction, and a commodity procurement plan. Comparison between the original and revised due dates for each deliverable showed that adjustments, approved by USAID, ranged from two to six months for 13 of 15 deliverables. The other two deliverables were submitted before their due dates. Additional details on the construction aspects of the project are discussed below.

The Gaza Wastewater Project includes two contracts with Metcalf & Eddy. Under the first contract Metcalf & Eddy received \$24.4 million to improve the sewage collection system and the stormwater drainage system of Gaza City. Initial work involved replacing sewers, water lines, manhole covers, curbs and gutters. These activities cost about \$2 million and were completed in less than a year, beginning on July 20, 1997 and completed on April 24, 1998.

Follow-on activities under the first contract included the design and construction of a new stormwater infiltration basin and the rehabilitation and expansion of an existing stormwater catchment reservoir (see photograph on page 19). Also two new sewage pumping stations were to be constructed. When we first visited Gaza City in May 1998, the contractor had just begun work on the infiltration basin and the catchment reservoir. The estimated completion date for both these activities was July 31, 1999. Also, construction of the new sewage pump stations started in May 1998 and the scheduled completion date was August 15, 1999.

Through the second contract of \$9.7 million, Metcalf & Eddy will expand and upgrade Gaza City's wastewater treatment plant and rehabilitate wastewater infiltration facilities nearby the plant allowing treated wastewater to percolate down to the aquifer. Construction activities at the plant were just getting started as of May 1998. Those activities are scheduled to end in February 1999.

Metcalf & Eddy also received a third contract related to water under a different project. Under the Industrial Estates Development Project, it received a contract for \$6.2 million to build a reverse osmosis desalination plant to supply water for the Gaza Industrial Estate in the Gaza Strip. As of May 1998, the reverse osmosis plant at the Gaza Industrial Estate was nearly complete. The plant was scheduled to be operational on August 31, 1998, which is five months after the contract due date.

In the West Bank the Mission's main contractor is Camp Dresser & McKee International, Inc. Camp Dresser and McKee has a \$67.7 million contract (original amount \$46.6 million) to provide comprehensive project management services including preparation of master plans, feasibility studies, engineering studies and designs, commodity and construction procurement, construction management services, and related institutional support and training. The main construction activities are a bulk water transmission system and four production wells for the Bethlehem-Hebron area of the West Bank and a bulk water transmission system for the Jenin area.

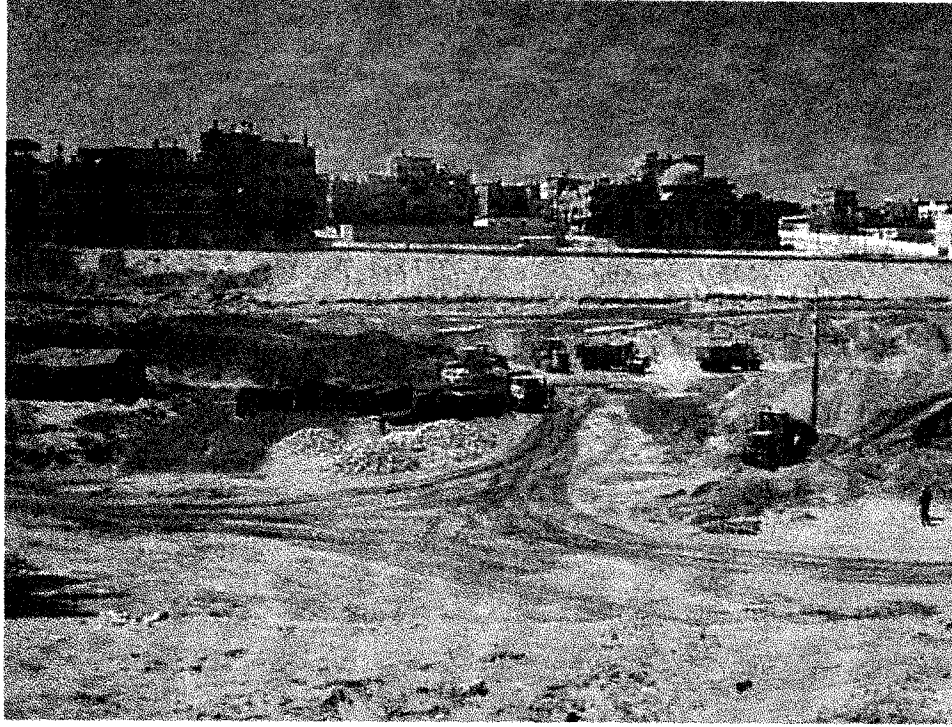
Activities under the Camp Dresser & McKee contract have been considerably delayed. The delays were due to a combination of factors including civil unrest, difficulties in data acquisition, changes in source and origin requirements, uncertainties about power availability, lack of approvals on pipeline alignments, increased scale of the basic works, and delayed issuance of permits.

Obtaining approvals and permits from the Israeli authorities has been a particular problem. Permits are required for drilling wells, any construction above ground, and for withdrawing water from a well. An August 1997 Mission document assessing the problems encountered in obtaining permits basically attributed the problems to the Mission initially not being fully informed of the detailed steps and agency approvals required, plus bureaucratic resistance on the part of the Israelis. The document described the process as being "long and tortuous, with many twists and turns". However, after U.S. Embassy officials met with high level Government of Israel officials to "break the logjam on permits", the Mission felt that the Israeli organizations involved in the process demonstrated a readiness to work directly with USAID to discuss the issues and resolve the problems, and that the Mission had finally learned all the steps and agencies involved in the process³.

As a result of the factors causing the delays, the construction activities in the West Bank are considerably behind schedule. For example, the original contract was for the production wells and the bulk water transmission system for the Bethlehem-Hebron area to be completed by April 30, 1997 and December 31, 1997, respectively. However, actual drilling of the wells began in February 1998 and final completion is expected at the end of May 1999, which is a 25-month delay from the completion date contained in the original contract schedule. Construction of the transmission system started in February 1998 and is expected to be completed in late March 1999, which is a 15-month delay from the original contract date.

In addition to the schedule delay, there was no provision in the lump sum, performance-based contract with Camp Dresser & McKee for the additional work caused by the unanticipated delays. Therefore, the Mission accepted a contractor proposal to maintain a core design team in-country for an additional year to undertake most of the redesign and information gathering work related to relocating well sites and water transmission systems to make them acceptable to the Israelis.

³At the time of our audit, however, the Mission suggested a further caveat should be added. The Mission said that it knows the procedures as they are or were—not necessarily as they will remain—and that it has learned the procedures only up to a certain point; for example, there still have been no permits to extract water.



Rehabilitation and expansion of Sheikh Radwan storm water catchment reservoir in Gaza City. (July 1998)



Construction of a 10,000 cubic meter water storage reservoir in Bethlehem. (May 1998)

This resulted in additional design phase costs of \$2.2 million. Additionally, the delays in the design phase resulted in late initiation of the contract's construction activities, and the redesigns themselves led to changes in the physical scale and complexity of the construction activities. Both these aspects served to drive up costs under the construction phase of the contract by \$18.3 million.

During our visit to the Bethlehem-Hebron area in May 1998, we noted that construction had started on the bulk water transmission system. Construction was underway on two water storage reservoirs at either end of the system (see photograph of the reservoir at Bethlehem on page 19) plus preparatory work was being done on the trenches in which the bulk supply pipeline would be laid, and the site for a pressure booster station was being prepared. Additionally, one of the four production wells was being drilled and site preparation was underway at two other well sites. As of July 1998, Camp Dresser & McKee was estimating that the above construction activities would be complete by May 25, 1999.

Although the Mission's water activities in the West Bank have experienced considerable delays and cost increases, it is evident that much of the problem was beyond the Mission's control. Also the Mission is now more knowledgeable of the permit approval process and has demonstrated that it will seek higher level help if needed to resolve further problems. As the Mission appears to have resolved its earlier problems, we are not making a recommendation.

Management Comments and Our Evaluation

The Mission had no comment on this section of the report other than to note the accomplishments to date of Metcalf & Eddy under the Gaza Wastewater Project.

SCOPE AND METHODOLOGY

Scope

We conducted our audit of USAID/West Bank and Gaza's Water Activities in accordance with generally accepted government auditing standards. We performed this audit from May through July 1998. In conducting this audit, we examined the internal controls related to the audit objectives.

The Mission's water activities in the Gaza Strip and the West Bank are funded under four projects: in the Gaza Strip, the Gaza Wastewater Project and the Industrial Estates Development Project, and in the West Bank, the Water Resources Program and the Integrated Rural Development/Capacity Building Program. The main implementing entities for the first three of these projects are two contractors, and, as these contractors are the Mission's main implementing entities for water activities, we concentrated our review on them.

Under the Gaza Wastewater Project, Metcalf & Eddy International, Inc. has received two contracts totalling \$34.1 million to mitigate problems of sewage system overflows in Gaza City and to improve the city's wastewater management. Additionally, under the Industrial Estates Development Project Metcalf & Eddy received a \$6.2 million contract to build a reverse osmosis desalination plant in the Gaza Strip. As of July 13, 1998, \$40.7 million had been obligated and \$10.7 million expended under the Gaza Wastewater Project, and \$6.0 million had been obligated and \$3.2 million expended under the Industrial Estates Development Project.

Under the Water Resources Program, covering the West Bank, Camp Dresser & McKee International, Inc. has a \$67.7 million contract to provide comprehensive project management services in the water area. Among the activities under this contract are the design and construction of four major water production wells and a bulk water transmission system for the Bethlehem-Hebron area and a bulk water transmission system for the Jenin area.

Also under the Water Resources Program, the United Nations Development Program and two nongovernmental organizations receive funding, mainly for activities to rehabilitate and extend water distribution systems in municipalities and villages. Similarly, under the Integrated Rural

Development Project/Capacity Building Program, also in the West Bank, another nongovernmental entity received a \$5.5 million grant involving among other things the rehabilitation and extension of village water systems.

As of July 13, 1998, \$85.3 million had been obligated and \$24.5 million expended under the Water Resources Program and \$5.1 million had been obligated and \$2.1 expended under the Integrated Rural Development Project/Capacity Building Program.

We performed the audit at USAID/West Bank and Gaza in Tel Aviv, Israel and in contractor offices in the Gaza Strip and the West Bank. In relation to Gaza Strip activities, we also met with Italian government officials, a local management consultant working with the Swedish aid program, and an engineer associated with a French company to discuss the activities of these other donors. We also observed the construction of the stormwater and wastewater works and the reverse osmosis desalination plant, all being done under contracts with Metcalf & Eddy. In the West Bank, we observed well drilling activities and initial construction activities for the bulk water transmission system both being done under the Camp Dresser & McKee contract to supply water to the Bethlehem-Hebron area. We also held discussions with the General Manager of the Jerusalem Water Undertaking (a large water utility) in relation to activities in the water sector.

Methodology

For the purpose of determining whether USAID/West Bank and Gaza implemented planning and performance measurement systems in accordance with USAID directives, we reviewed the Mission's performance monitoring plan for its water activities and its R4 document submitted to USAID/Washington in 1998. We determined whether the strategic objective and intermediate results indicators logically relate to the overall strategic objective, baseline data has been obtained for each indicator, and the Mission has in place a performance monitoring plan which meets USAID's requirements. We assessed whether the design of the information system supplying the R4 data appeared to be sound, i.e., we traced reported results back to the source documentation to see how the information rolled up into the overall figures and whether there were any obvious problems with the design. We also determined whether the indicators were precise and unambiguous and whether the actual results data reported in the R4 were reliable and supported.

For the purpose of assessing whether USAID/West Bank and Gaza water activities were making satisfactory progress, we compared schedule dates for deliverables shown in contracts and inception reports with contractor progress reports and other documentation, made site visits to observe construction activities underway in the Gaza Strip and the West Bank, and interviewed Mission and contractor officials. Finally, we obtained and reviewed USAID/West Bank and Gaza's internal control assessment required under the Federal Managers' Financial Integrity Act.

Date: 18 December 1998

From: Christopher D. Crowley, Director USAID/West Bank and Gaza

To: Darryl Burris, RIG/A/Cairo

Subject: Audit Report of Water Activities

In analyzing the Mission's efforts to identify, measure and improve indicators and data related to its Water Resources Strategic Objective¹, the developmental and political imperatives to provide Palestinians with greater access to and facilitate their more effective use of scarce water resources have been overarching considerations. The developmental rationale for USAID's water program is based on the fact that water is the most critical constraint to improving environmental, health and economic conditions throughout the region, and especially in the West Bank and Gaza. Politically, access to and control of the water resources required to meet the basic needs of the population in the West Bank and Gaza are central to Palestinian aspirations for autonomy and future cooperation between countries in the region. These developmental/political considerations have compelled the Mission to design and implement activities, despite the fact that reliable data are not available for the West Bank and Gaza. Furthermore, these efforts have taken place during a period of evolving Agency guidance on performance planning, monitoring and reporting systems during the three years since the Mission's Strategy was developed. This has resulted in mixed signals to the field (in general, not just to this Mission), and varying interpretations as to the scope and nature of required impact reporting. (For example, the USAID/W offices that assisted in the development of our Strategy and reviewed/approved our annual program submissions suggested and subsequently concurred with broad sectoral reporting, while the auditors appear to suggest reporting of USAID results only.)

While attempting to deal appropriately with these inconsistencies, the Mission has approached performance monitoring with the underlying premise that this process will provide a basis for informed decision-making and effective management by USAID and its partners. However, consistent with the Agency's most recent communications on the subject, we are also striving to ensure that the "transaction costs" of data collection are minimized and justified based on the data's value in monitoring the effectiveness of our program and shaping budgetary decisions. The Mission expects that the findings and recommendations of the subject Audit Report will feed into these ongoing efforts to refine the structure of our performance monitoring plan (PMP) in the water sector and determine the feasibility and utility of future data collection/analysis exercises.

Before addressing the Audit Report's specific recommendations, there are several cross-cutting clarifications and corrections that we would like to emphasize.

¹The Mission's Water Resources Strategic Objective has accounted for approximately 60% of USAID's annual \$75 million budget, as pledged by the USG to support the Palestinian-Israeli peace process following the signing of the Declaration of Principles in late 1993.

1) The urgency with which the USAID/West Bank and Gaza Program was developed required the identification and design of interventions--and development of a PMP--notwithstanding the lack of reliable data. This situation has been exacerbated by the undefined future status of the West Bank and Gaza, and the start-up nature of Palestinian counterpart organizations. Furthermore, while the GOI and PA requested that USAID provide support to implement Article 40 of the Interim Agreement, the GOI failed to provide us with basic hydrogeological data, despite interventions at the highest USG levels. Notwithstanding, the Audit Report states that the "root cause" of the absence of reliable information for performance monitoring purposes is the "overly broad scope of activities the Mission is attempting to capture." This judgement, which underlies the entire Report, ignores the generalized absence of reliable data following thirty years of occupation and the nascent nature of Palestinian partner organizations, which in our opinion are the actual "root causes" of the cited shortcomings in the Mission's water sector PMP.

2) The Mission's sector-wide strategic perspective and resultant inclusion of indicators covering the entire West Bank and Gaza reflect the high percentage of USAID's investments relative to total donor financing in the water sector, and--perhaps more importantly--the hope that future investments by other donors can be directly or indirectly attributed to the start-up risks that USAID is taking and the political leadership provided by the USG. It is also specifically consistent with the guidelines provided by ANE advisors who assisted the Mission in the early stages of its strategy development. As an example, an ANE assistance team shared a document entitled "Strategic Planning and Results Frameworks: Q's and A's" which--among other things--stated that strategic frameworks are "expected to lay out a complete development hypothesis" and that "any key intermediate results of other partners should become an explicit part of our monitoring systems...[to] include indicators and targets." While more recent communications from USAID/W seem to indicate that there is a recognition that such an approach may over-complicate performance measurement efforts, it is clear that the original scope of the Mission's Water Strategy and PMP was shaped by general USAID/ANE guidance, and decisions to revise to such can not be taken by the Mission in isolation.

3) Throughout the audit report, there is a suggestion that targets should be established based on a detailed accounting of the expected outputs/results of specific USAID, other-donor and Palestinian implementation plans. Such an approach is not practical in general, and especially not in the West Bank and Gaza, for the following reasons: a) certain sectoral targets were established in Article 40 of the Oslo II Accords (e.g., increased access of Palestinians to water supply); these numbers, which have been subject to varying interpretations, formed a starting point from which USAID and Palestinians mapped out the future direction/impact of U.S. assistance in the sector; b) as stated above, reliable baselines did not exist in 1996 when the Mission first developed its Strategy, and data will only improve incrementally as Palestinian autonomy and capacity increase; c) while the confirmation and refinement of targets can be based on actual plans and accomplishments to date, it is unrealistic to expect detailed implementation plans (e.g., specific sites, yields, water uses) to exist at the beginning of a 5- to 8-year strategy period (this was even less likely as USAID and donors were just starting-up their West Bank and Gaza programs in 1995/1996); and d) certain indicators will reflect the impact of a variety of interventions, not all of which can be quantifiably attributed to an eventual target (e.g., the distribution of water among domestic, commercial, agricultural and industrial users will depend on the volume of supply, the sources/quality of that supply, conservation measures, pricing,

policy environment, public awareness, the economic situation, etc., and each of these will depend on a separate variety of factors).

We believe that the approach taken by the Mission to establish preliminary order-of-magnitude targets and refine them as better baseline data and more specific implementation plans become available is consistent with Agency guidelines. For example, CDIE's TIPS #8 suggests that Missions consider the following when establishing targets: the performance baseline, prior trends, research findings, accomplishments of similar programs, customer expectations and expert judgements. As the first four types of information were only available only to a very limited degree, in establishing preliminary targets the Mission relied heavily on customer expectations--as represented by the technical goals and political priorities of Palestinian partner agencies--and judgement of Palestinian and U.S. experts. The TIPS #8 also suggests that targets be established in one of three ways: project a future trend and add the impact of new activities; set annual performance targets and build up to a final target for the strategy period; or establish a performance target for the end of the planning period, which may be based on the judgements of experts. The Mission decided and still believes that water sector targets for the West Bank and Gaza can only be set using the last of these methods outlined in the TIPS. Furthermore, the TIPS provides the following advice in collecting baselines: "Where baseline information is inadequate, many USAID operating units initiate a data collection effort as soon as they decide what their strategic objectives and intermediate results are and the performance indicators they will use to judge progress. The first set of data collected on these indicators becomes, in effect, the formal baseline..." This is precisely the approach taken by the Mission.

4) The Mission's Strategic Objective includes two mutually reinforcing and equally important thrusts: greater access to and more effective use of scarce water resources. Therefore, USAID would not consider progress made in one area at the expense of the other a positive outcome. To reflect this desired balance, the Mission has established indicators designed to reflect progress in each area, in some cases within a single data element. However, on several occasions the Audit Report criticizes existing indicators because future progress will not lead directly to a net increase in the amount of potable water available for domestic consumption, or because increases in the quantity of certain types of water have not been measured. This reflects a basic misunderstanding of what the Mission hopes to achieve. For example, the Mission considers the volume of physical losses (leaks) and non-physical losses (e.g., illegal taps, faulty metering) to be similarly critical, as one reflects access to water and the other effective use. Therefore, this aggregate figure (to be measured as the gross supply less metered water consumption) is more important in the Mission's results framework and more practical to collect than disaggregated data reflecting only that water which is lost to/saved for the domestic consumer. Likewise, the Audit Report suggests that the Mission is remiss in not counting un-regulated re-charge and re-use of raw sewage, and that future regulated use of non-potable sources may not reflect a net increase in the volume of water available for re-allocation for domestic use. Again, this suggestion ignores an underlying principle of the Mission's Water SO: unless wastewater is treated to an acceptable level and used in a regulated manner, it might increase the volume of water available to the consumer, but we would consider it an ineffective use and contrary to USAID's and Palestinians' long-term interests.

5) During the conduct of this audit, USAID and RIG staff have interchanged a significant amount

of information and opinions. In several instances, there are facts/statements in the Audit Report that are not--in the opinion of the Mission--accurate or well-stated. While all these items have already been discussed with the auditors and are reflected in this reply to the extent they are directly relevant to the Audit Report's recommendations, the attachment to this reply includes detailed Mission comments that should become part of the audit record.

Notwithstanding the above general comments, the Mission recognizes and has reported in its Strategy and each subsequent R4 that additional work is required to refine its results framework, adjust indicators/targets and improve data for its Water Resources Strategic Objective. Below is a summary of the Mission's opinions and anticipated actions relative to each of the Audit Recommendations. However, since at least some of the possible modifications of Mission indicators could have strategic implications and/or will be driven by changing Agency guidelines on impact reporting, the Mission will have to consult with the appropriate USAID/W offices as it takes action. In addition to this consultation requirement, because of the inter-relations of the Audit Recommendations, we believe that it is best to outline actions taken and request closure en masse, following the preparation and approval of the Mission's next R4 (expected in the Spring of 1999)--even in the case of Recommendations for which the Mission already has a plan of action in place.

Recommendation No. 1: *We recommend that USAID/West Bank and Gaza, for its water resources strategic objective, clarify, as appropriate, what each indicator is supposed to measure.*

Summary Mission Position: In preparing its next R4, the Mission will continue the process of refining its indicators, taking into consideration the suggestions and comments included in this Audit Report. Final decisions on such actions will be made in the context of USAID/W's review of the R4.

Discussion: At least on an annual basis, the Mission reviews and refines its performance monitoring plan as part of its R4 submission. The indicators cited in the current Water Resources PMP were developed in consultation with USAID/W, Palestinian authorities, and world-class water experts. We remain convinced that tracking these particular indicators would best serve USAID and Palestinian managers. However, given the lack of initial baseline data, the development of new data sources and evolving USAID implementation plans, it was to be expected that several of the indicators used for USAID reporting would be modified based on the short-term feasibility of data collection efforts. This is especially the case this year for several reasons: 1) the Audit Report provides us a detailed, independent assessment of how our indicators might be understood/not understood by non-Mission audiences; 2) the Mission expects its contractor to provide a report that will form the first practical/comprehensive test of the feasibility of collecting data for USAID's proposed indicators; 3) plans will be finalized for architecture and engineering services for a range of second generation water interventions (through the FY 2004), which--along with progress to date--will establish a more precise plan for USAID's water sector interventions than was previously possible; 4) in the context of lessons learned in the 2-3 years since Mission SO frameworks were established and the Administrator's instructions to review the implications of performance monitoring efforts/requirements on relationships with partners, the Mission will undertake a general assessment of the viability and

cost of its overall performance monitoring system as our next R4 is prepared; and 5) there are indications that the Agency will issue new guidelines on performance monitoring and reporting systems.

Specifically, the Mission will consider the possibility of narrowing the scope of some of its indicators, to capture USAID-specific impact only or perhaps including that of major other-donor activities. However, it is possible that in some or all cases this will not be advisable or practical, since data might be collectable/significant only on a broader scale (e.g., domestic consumption rates, unaccounted for water). Likewise, in some cases sector-wide data might be necessary for management purposes (e.g., to determine if progress is being made or if increased USAID investment in particular technical areas is needed), regardless of whether or not they are used for USAID reporting. [Indicator-specific considerations are cited in the attachment to this reply.]

Recommendation No. 2: *We recommend that USAID/West Bank and Gaza, for strategic objective indicator 1—the main strategic level indicator—develop a plan of action for obtaining reliable data; the plan may consider alternate methods of obtaining reliable data for the whole of West Bank and Gaza (such as statistical samples) or, alternatively, the indicator itself may be changed to something for which reliable data can be more readily obtained.*

Summary Mission Position: The Mission already has a plan in place to provide incrementally better data as a tool for water resources management in the West Bank and Gaza. Included in these data will be acceptably reliable information on per capita consumption rates, although the definition of the indicator may be adjusted to reflect the MIS' less-than-total coverage of Palestinian users in the immediate term.

Discussion: The figures cited in USAID documents to date have been based on non-USAID studies, broad preliminary estimates and incomplete surveys which were unreliable, imprecise and sometimes contradictory. However, USAID's initial water sector contract, signed with Camp, Dresser and McKee (CDM) in mid-FY 1996, included support for nascent data collection/analysis efforts within the Palestinian Water Authority (PWA). While the Mission recognizes that data will continue to be incomplete and imprecise for some time, it is expected that the next CDM/PWA Management Information System (MIS) Report will include data from all the major utilities/municipalities for those indicators most relevant to short-term management and reporting needs, including domestic metered consumption. CDM/PWA have delayed issuance of that report, pending case-by-case consultations with the utilities/municipalities to improve the consistency and quality of their input. Based on this report, the Mission may re-state this indicator: for example, limiting it to the selected areas included in the survey--and using this sample (which is expected to cover the majority of the Palestinian population and all areas with significant USAID projects) as a proxy for overall impact. In the future, the Mission will continue to support development/refinement of the MIS, and--pending 100% survey coverage--use the resulting data for proxy indicators (i.e., selected but broad portions of the population/resources for which data are available). This approach will be more useful and practical both in the short- and longer-term than the statistical sampling suggested in the Audit Recommendation. Likewise, since domestic metered consumption is the indicator that best reflects the broadest number of USAID and Palestinian strategic interests in the sector (most if not all the elements of access to

and effective use of water), the Mission will not consider an alternative indicator. Therefore, given the circumstances in the West Bank and Gaza, the Mission is of the opinion that it already has a plan to obtain data for this indicator, to the extent and degree of reliability appropriate for immediate management purposes.

Recommendation No. 3: *We recommend that USAID/West Bank and Gaza establish a control which requires: (1) the analysis of reports received from the Mission's contractors and other sources to identify water activities funded by other donors or by the Palestinians themselves which might contribute to results being reported under the Mission's performance indicators, and (2) visits to the activities identified to assess whether and when the activities are expected to produce results that should be reflected in the Mission's managing-for-results framework.*

Summary Mission Position: We believe that the current level of interaction between donors is appropriate and effective, although USAID will continue to take the lead in improving donor coordination through targeted support to the PWA and active involvement in formal (sub) sector working groups. It would be of limited management utility to attempt to identify and quantify the impact of all prospective/planned/ongoing non-USAID water activities, and we can not envision a viable "control" for such an effort. Instead, in conjunction with actions taken in response to Recommendation No. 1, the Mission might: refine indicators to include only USAID results, identify "major" other-donor activities to be included, and/or rely on sufficiently accurate data for selected but broad segments of the West Bank and Gaza as a sector-wide proxy.

Discussion: The Mission has provided assistance to the strengthen the PWA's donor coordination function, to including planning and tracking donor activities. This has resulted both in mechanisms for direct discussions among donors and the PWA and publications listing and describing ongoing activities. The Mission considers regular interaction between donors to be essential to the good management of the water sector, especially given USAID's leadership role. An example of such would be plans for the European Investment Bank financing of the construction of the Yatta-Dura wells/transmission system, based on USAID's modeling and design work. While the Mission has made efforts to keep abreast of the major other-donor and Palestinian plans/activities that are most relevant USAID's SO, it is impractical to expect that--for target-setting and indicator-reporting purposes--USAID could anticipate, track and account for all other-donor, Palestinian public and private sector, and NGO water activities. Instead, to the extent that the Mission continues to include sector-wide indicators in its PMP (this may be adjusted as discussed relative to Recommendation No. 1), USAID expects to rely on overall PWA plans to establish targets and the improved data that will be available through the PWA MIS to report impact. For other indicators, the Mission may include data from USAID-related activities only (perhaps to include those systems that are funded by other donors but directly linked to USAID work, e.g., the Yatta-Dura system), or gather data from USAID and "major" other-donor systems. Such decisions will be driven by the clarification of indicators referred to in Recommendation No. 1. Therefore, the exact relevance of this Recommendation is not evident to us at this time.

Recommendation No. 4: *We recommend that USAID/West Bank and Gaza develop a plan of action to ensure that by the earliest date practical the Palestinian Water Authority's management information system captures reliable and consistent data on water activities for*

the whole of the West Bank and Gaza. Also, to the extent the Mission plans to use this system as the basis for its reporting, the Mission should ensure that its performance indicators are consistent with the information being captured by the system.

Summary Mission Position: We believe that we currently have a feasible and effective plan in place to incrementally improve the data collection/analysis capacity within the PWA, to serve the PWA as a management tool and provide USAID with selected performance monitoring data. The extent to which USAID relies on this system for its internal reporting requirements will depend on the decisions taken relative to the previous recommendations, the success/shortfalls of immediate-term data collection efforts and consultations with USAID/W.

Discussion: As cited above, USAID has been providing assistance to the PWA to develop a management information system through its contract with Camp, Dresser and McKee (Task #3). While the primary purpose is to provide Palestinians with a tool for managing the water sector, it is expected that the system also will give the Mission increasingly reliable data for its internal reporting requirements. Although illustrative baselines have been cited in past USAID documentation, the Mission had always stated the need to finalize more accurate baselines for its sector-wide indicators--or narrow the scope of those indicators--based on the first full CDM/PWA MIS report. Due to data collection problems and higher priorities for its contractor and the PWA (e.g., initiating well drilling/construction efforts), CDM's 1997 Task # 3 Report included only a small sampling of Palestinian utilities/municipalities and indicators, and therefore could not be used to update baselines or report progress. However, in recent months CDM/PWA have increased the emphasis placed on this task, focused on the most important data elements of the MIS and concentrated collection efforts on the most significant municipalities/utilities. Therefore, since the 1998 Task #3 Report will provide fairly reliable data (from the end of 1997) covering the majority of the Palestinian population, the Mission expects to be able to use these data as proxies for baselines/results for its sector-wide indicators.

Given the still developing capacity within the Palestinian water sector, to date the Mission has cited data related to its proposed indicators based on previous non-USAID reports, estimates made by CDM in early 1997 (just a few months after they initiated work) based on available bulk figures, very preliminary survey results, or limited project-specific reports. The intent has been to give USAID management some idea of the current status of the Palestinian water sector and an order-of-magnitude estimate of progress that could be expected. Clearly we have been unable to establish reliable baselines, except in those cases where an indicator was defined in such a way that the baseline is "zero." However, using such an approach across the board would minimize the management utility and is contrary to guidelines the Mission had received from USAID/W. (For example, a "Crib Sheet on Selecting Indicators and Setting Targets" stated: "quantitative measures should be expressed not just in terms of a numerator --i.e., an absolute number, but should include a denominator whenever possible, because the denominator indicates the size of the problem being tackled.")

The Mission has cited the shortcomings of available data in each of its relevant submissions (e.g., incompleteness, lack of comparability, no basic census information for 30 years, etc.). While the data cited to date should be considered illustrative, CDM and the PWA have been working since 1996 to establish a reliable MIS. Admittedly, the 1997 MIS Report was a very incomplete survey. Therefore, the Mission did not utilize it to adjust baselines or revise targets. However,

CDM and the PWA have been working very closely with municipalities and utilities to complete a broader and more consistent survey for its 1998 MIS Report. In fact, the issuance of this report has been delayed due to the need--identified by CDM and PWA--to spend more time with those technicians and managers who will provide the detailed input to the system. This has included/will include: 1) a series of visits to all municipalities/utilities to be included in the current MIS to explain indicator definitions and review data quality; 2) a workshop involving most of the municipalities/utilities to review the MIS and discuss medium- to longer-term targets; 3) a seminar with high-level water managers and policy-makers to establish sector-wide targets. While the 1998 survey will still not cover 100% of the West Bank and Gaza and continuing difficulties in collecting reliable data can be expected, the next MIS Report will be the best source of water data for the West Bank and Gaza available to date, and therefore it is expected to be a useful tool for management purposes and reporting requirements.

The Mission will possibly reduce its reliance on the MIS for internal reporting requirements, clarify indicators that continue to rely on the MIS, and continue support to incrementally improve the PWA's data collection capacity. USAID also plans to take several related actions in the future: 1) As an augmentation to a regional U.S. Geological Service activity, USAID will finance support to the PWA to evaluate data for groundwater, surface water, water quality, pumping, and precipitation. While the resulting data will not be directly used in the Mission's PMP, this assistance will further professionalize PWA staff, improve the quality of the detailed technical data available for the West Bank and Gaza, and inform PWA target-setting exercises. 2) As cited above, the PWA--with CDM's support--is undertaking a medium- to long-term target setting exercise with municipalities and utilities. Again, while the results will not be directly utilized in the Mission's current PMP, they will inform Mission management decisions related to future investments, help in confirming/revising Year 2000 sectoral targets, and be the basis for establishing out-year targets for water resources management in the West Bank and Gaza. 3) The contracts for architecture and engineering services for the Gaza Coastal Aquifer Management Program and the next phase of USAID's bulk water supply program include support for monitoring wells and expanded modeling, which will both improve the general quality of data in the sector and the PWA's planning capacity. 4) In FY 1999, the Mission expects to sign a new comprehensive contract for architecture and engineering services related to its future water sector activities. The institutional capacity building component of this contract will include support to the PWA for donor coordination and data collection/analysis, as a follow-on assistance that will have been provided by CDM through the summer of 1999.

Recommendation No. 5: *We recommend that USAID/West Bank and Gaza, for its water resources strategic objective, cross-index all baselines, results, targets and other figures in its performance monitoring plan to where they can be found within supporting documentation.*

Summary Mission Position: Since figures cited to date were based largely on incomplete and unreliable sources, and targets were established based on order-of-magnitude assumptions, there have been limited citations to cross-index. However, it is expected that indicator definitions will be clarified, more consistent/reliable/detailed data will be available, and baselines will be finalized as the Mission's next R4 submission is prepared/approved. The Mission agrees that its future reporting will include detailed references to all data sources.

Discussion: None.

Drafted:	TDelaney, PPD	_____
Clearances:	JStarnes, WRO	_____
	NWijesooriya, FMO	_____
	DLRhoad, DDIR	_____

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Attachment to Mission Reply

For the record, below are Mission comments/corrections related to specific statements included in the draft Audit Report. [Note that page references are left blank, since they may differ based on final formatting of the Audit Report.]

INTRODUCTION:

1) "Furthermore, the Mission told us that for essentially political reasons the Mission decided to finance" [page ??] The Mission's motivation was based on both political and developmental considerations.

2) "Additionally, Metcalf & Eddy was awarded a third contract for \$6.25 million..." [page ??] The contract was originally for approximately \$5.2 million and was increased to \$5.3 million in early FY 1998.

REPORT OF AUDIT FINDINGS:

3) "We also noted that the baseline was for the whole of the West Bank and the Gaza Strip, but the 1997 results were based upon a nonstatistical sample of water utilities. The end result was a comparison not known to be statistically valid." [page ??] Citations from the 1997 CDM/PWA MIS report in the Mission's last R4 were scarce, and it was made very clear that the Mission did not consider them to be valid for adjustments of indicators/baselines or unqualified comparisons to data from other sources. Instead, the R4 stated that such actions would be taken based on the 1998 MIS Report.

4) "Our review found that six of nine baselines for performance indicators were not supported with reliable data." [page ??] In fact, the Mission has always stated that the baselines cited were not reliable, and would have to be confirmed/adjusted once better information became available.

5) "Although raw (untreated) wastewater is already being used for both purposes, and thus already constitutes part of the baseline water supply, the Mission did not want to recognize it. The result may be that later on the Mission will report that the water supply has been increased due to treated wastewater when in fact the volume has not changed, only the quality." [page ??] The Mission does indeed recognize that such use occurs. What we do not recognize as a positive outcome within our results framework--and never will--is the unregulated/environmentally unsound use of raw wastewater. In fact, when looking at reuse and recharge, we specifically designed our indicators to account for the equally important factors of quantity and quality, and therefore expressly excluded the inclusion of the use of raw sewage.

6) "An example of an indicator where reliable information, baseline or otherwise, does not exist is the Mission's performance indicator "Volume of losses prevented." This indicator is very important as it is supposed to be measuring the reduction in physical losses from the domestic water supply systems of the West Bank and the Gaza Strip. The baseline value for the Mission's main strategic objective level indicator on per capita consumption assumes that 43 percent of the total domestic water supply is lost before the remainder reaches the consumer. The 43 percent

estimate came from the Mission's contractor and was based on estimates by water utilities and published data. So it is simply an estimate of undetermined reliability. We observed that the loss percentage estimate includes components to account for inaccurate meter readings and illegal connections—factors that do not reduce the amount of water reaching the consumer. We further noted that as part of a survey done in 1997 it was estimated that physical leakage from the domestic water supply is no more than 28 percent. The difference from using a 28 percent estimate for the water losses versus 43 percent has quite a significant effect on the calculated baseline value for the Mission's main strategic objective level indicator. With this adjustment, the baseline value for the main strategic objective level indicator rises by about 14 liters/capita/day—from 56 to 70. As a comparison of the magnitude of this adjustment, during the strategy period the Mission only expects to add 6 liters/capita/day to consumption beyond the baseline. Another point worth mentioning is that the survey questionnaire used this year by the Palestinian Water Authority (PWA) to obtain information for reporting on the Mission's performance indicators does not have a question to estimate physical leakage." [page ??] As previously expressed to the auditors, the Mission finds this entire section unintelligible. The Mission has stated that this indicator is designed to measure both physical losses (leaks) and non-physical losses (illegal taps, faulty metering, etc.) from the overall water supply. The Mission has also made clear that it did not consider the 1997 survey to be a valid basis to finalize baselines or make comparison to previous estimates. Therefore, the suggestion of modifying the baseline for per capita metered domestic consumption is faulty on two counts: a) by design, the Mission is counting only metered consumption, since it captures a range of the desired impacts of USAID interventions (e.g., illegal taps might increase household access to water, but reflect poor management of resources); and b) as the auditors themselves have stated elsewhere in this Report, it is not valid to apply/compare the data included in the incomplete 1997 survey to figures from other sources.¹ Finally, the questionnaire used for 1998 survey does include estimates for overall losses (physical and non-physical) which directly correspond to the cited indicator. It was determined that it was not practical at this time to collect data on the disaggregated elements of this losses figure. However, because of their long-term management implications, the MIS will include such a breakdown as soon as possible in the future.

7) With regard to reported 1997 results, the audit found that for most performance indicators the Mission reported results as zero, i.e., no results. We generally considered these "no results" situations to be not supported by reliable information because the Mission had not verified the actual situation. For only one of the nine performance indicators did we conclude that the 1997 results were supported with reliable data. [page ??] The Mission has consistently stated that reliable data for the West Bank and Gaza (or some significant portion thereof) are not available. The actual situation can not be verified until the data sources are developed. Furthermore, the limited USAID-specific and other-donor impact cited in the last R4 for 1997 was clearly not meant to reflect the sector-wide situation, but to provide some illustrative information pending the availability of broader data. Finally, even in those cases where activity-specific data might be aggregated--as opposed to using sector-wide data sources--statistically significant impact could

¹In fact, a more recent GTZ study cites "unaccounted for" water levels of 41% and 51% for the West Bank and Gaza (a figures that coincide closely to the 43% estimate made by CDM in early 1997). The point highlighted by these fluctuating estimates is that baselines/targets should not be finalized until a reasonably reliable/consistent source can be sited--e.g., the PWA/CDM MIS.

not be expected to date.

8) "Further, based on the Mission's verbal explanations and other documentation review, we concluded that the targets generally lacked a reliable information basis, with lack of information on projects funded by other donors being a factor in many cases. An example of a Year 2000 target without a reliable basis was the performance indicator for "Volume of losses prevented." This target is based on a contractor assumption ..." [page ??] The Mission has always maintained that, due to the reasons previously explained, targets would have to be adjusted once reliable baseline data are obtained. In establishing targets that are several years out, the Mission contends that assumptions and estimates by contractor/counterpart experts are the best/only way to determine what is "reasonable to achieve" on a sectoral basis. This was especially the case given the start-up situation of the West Bank and Gaza program in 1996, when USAID and other-donor activity-specific implementation plans were largely non-existent.

9) "However, through other information sources, including review of contractor reporting to the Mission on other donors' activities, we noted references to at least 15 additional wells beyond those identified by the Mission. In addition there were a number of other activities such as wells being rehabilitated which would add results to this indicator but which the Mission did not mention. Since most of these activities were referred to in reports and newsletters from the Mission's contractor, we assume someone in the Mission was aware of them. However, the Mission's target does not include them." [page ??] Targets for the indicators related to these comments were established based on order-of-magnitude estimates, and results were to be reported based on sector-wide data. Therefore, specific accounting of all proposed/planned/ongoing other-donor activities would not be relevant or practical. USAID's information on the broader water sector (planning and actual work) is primarily derived from the PWA--the Palestinian agency charged with water sector management--and existing donor coordination structures. Through such means, USAID gathers information on the major activities in the sector, and influences their planning and execution, and can confirm/adjust (but not initially establish) its targets. Furthermore, as we previously informed the auditors and confirmed with PWA, there are not 15 additional wells of significant yield that will be dug for Palestinian use by the year 2000. Any additional yield provided by smaller interventions such as those referred to in the Audit Report, while perhaps not specifically accounted for in targets, would be captured by the sectoral MIS if the yield becomes part of the metered water supply.

10) "However, we found that the Mission was not closely monitoring the process and there were problems. The Mission's contractor told us that a greater effort and a continuous effort needs to be made to work with the water utilities reporting the information to the PWA." [page ??] We disagree with this statement. Indeed, as we have reported on many occasions, there are problems inherent to accessing and collecting data for the West Bank and Gaza. The Mission, its contractor, the PWA and utilities/municipalities have worked closely over the last two years to identify and address these problems. Indeed, the possible shortfalls of the 1998 Task #3 Report were identified by this group and corrective actions are being taken. For example: the data elements were limited to those most critical to short-term management needs; it was decided to focus on major utilities/municipalities, with the expectation that this effort will cover at least 80% of the Palestinian population; rather than collect the latest data available for each entity, 1997 data will be collected to better ensure that all parties have the data available; and one-on-one

visits (often return visits) were made to municipalities/utilities to ensure a common understanding of the definition of data elements and the best possible quality of input. The Mission's intent is to institutionalize this process within the PWA, otherwise the exercise would be artificial and of little value, even if it provided data for USAID's short-term reporting requirements. Of course, a continuous effort will be required to accomplish this. However, while greater effort (we assume that this means more staff/time) might improve the product, it can not come at the expense of Palestinian priorities to deliver services immediately. As such and as in all aspects of its water program, the Mission has had to find ways to make progress within the confines of the human and financial resources limitations of its Palestinian counterparts. (Note: It is predictable that contractor staff would state that their task would be easier if additional counterpart staff were available. However, while the PWA has only a single person working part-time on this data collection effort, the Mission does not--as a matter of policy--have the option of financing an increase in PWA staff for this effort. Likewise, it would be unrealistic for the Mission to expect the PWA to shift scarce staff resources from other priority areas to work on this effort.)

11) "Under the Gaza Wastewater Project, the prime contractor, Metcalf & Eddy International, Inc., appeared to be making satisfactory progress. The contractor..." [page ??] While it is mentioned previously in the Audit Report that UNRWA carried out the initial stage of this Project, it is worth noting in the context of accomplishments that through this stage: approximately 40 kilometers of sewer lines were cleaned/replaced, the Sheik Radwan Reservoir and Pump Station were rehabilitated, a central drainage area was dredged, a force main was installed, and commodities and training were provided to the Municipality to maintain the waste/storm water system.

12) "Analysis of Indicators, Baselines, 1997 Results and Year 2000 Targets"

Indicator

Comments

In general, it should be noted that all the "results" cited for sectoral data in the Mission's R4/PMP were for illustrative purposes only. As the Mission clearly stated, relatively reliable sector-wide data (or proxies based on surveys covering a significant portion of the West Bank and Gaza) could not be expected until receipt of the 1998 CDM/PWA MIS Report.

Strategic Objective (SO) indicator 1

Domestic consumption rate (metered) (liters/capita/day).

Indicator Description: Based on overall domestic supply (minus physical losses and unaccounted-for use) and population estimates.

--The Mission will clarify that East Jerusalem is not part of the indicator, and ensure that data from East Jerusalem is separated out of data reported.

--The baseline, target and perhaps the scope of the indicator may be adjusted once the Mission determines the validity and scope of the CDM/PWA MIS data. Any adjustment based on the very incomplete 1997 survey would be of no utility.

--The indicator is intended to be limited to metered consumption only. The Mission will confirm that data provided in the MIS either reflect consumption among the entire catchment population (preferred) or only among those metered households, and define the indicator accordingly.

--The Mission will also track and may provide supplemental information on area-specific supply/consumption figures (e.g., in the Hebron-Bethlehem area where there is a concentration of USAID-financed construction).

SO indicator 2

Agricultural and commercial requirements met with nonpotable sources (percentage).

Indicator Description: N/A

--The Mission has defined the indicator to exclude the unregulated usage of raw wastewater.

--While a final decision on this indicator is pending the receipt of the CDM/PWA MIS Report, the Mission recognizes that it may be difficult to develop a consistent/defensible estimate of agricultural and commercial demands, although the volume of regulated use should be relatively easy since there will be few such systems, and measurement could be limited to USAID activities only. The Mission may consider using only agricultural use--for which the Palestinians are likely to have a better estimate, qualitative reporting, or deleting this indicator.

Intermediate Result

(I.R.) 2.1

Volume of additional potable water from conventional sources (mm³/yr) (millions of cubic meters per year).

Indicator Description: N/A

--This indicator does not include imports from Israel, as imports were specifically listed under the "non-conventional source" indicator.

--The Mission will consider a more precise definition (e.g., new wells), and possibly limit the scope to activities financed by/linked to USAID, or major other-donor projects (to be identified).

--Results to date (including those related to well rehabilitations and private wells) would be statistically insignificant, and without a reliable MIS Report could not be captured without a very costly and detailed survey--which would still miss many small-scale activities.

--Numerous potential future well sites in the West Bank have been identified, and in some cases block permits may also have been processed. Some of these may have been brought to the auditors' attention, although it is possible that the development of all of the sites would be contrary to environmental/sustainable yield criteria. Regardless, the Mission has not been able to confirm with its Palestinian counterparts any actual plans to drill/develop 15 additional production wells in the near future, and therefore has not considered them in validating its order-of-magnitude targets.

I.R. 2.2, indicator 1

Volume of reclaimed water directly reused (mm³/yr).

Indicator Description: Storm water and treated wastewater for direct reuse, as distinguished from such water used for aquifer re-charge and indirect reuse.

--In fact, a lower-lever indicator cites 45/45 as the treatment level which will be the cut-off for inclusion in the Mission's data. However, the Mission could specific quality standards for reuse in the definition/ description of this indicator. Since these will vary depending on use, the definition could simply refer to reuse within a program regulated by the appropriate authority-- which would provide the varying details on quality norms.

--Whether or not potable water is freed up by future reuse, the Mission is only interested in environmentally sound reuse (our SO promotes access and effective use), making unregulated reuse of raw sewage irrelevant to this performance indicator.

--The Mission will consider limiting this indicator to only USAID-funded activities, perhaps including major other-donor projects (to be identified).

I.R. 2.2, indicator 2

Volume of reclaimed water used for aquifer recharge (mm³/yr).

Indicator Description: Storm water and treated wastewater for aquifer re-charge and indirect reuse, as opposed to direct reuse.

Comments the same as those for the previous indicator.

I.R. 2.2, indicator 3

Volume of losses prevented (mm³/yr).

Indicator Description: Rate of losses (physical and unaccounted for use) estimated at approximately 43 percent in 1996. System-wide data will be developed by multiplying the reduction in rate of losses to the total supply. Activity-specific data will also be tracked, as appropriate.

--While only physical losses reduce the domestic supply, USAID is interested in the more effective use of water, and therefore we want this indicator to reflect leaks, illegal taps, faulty metering, etc.; this relates directly to the fact that our primary SO-level indicator is limited to domestic metered consumption.

--The Mission will more clearly define whether this indicator includes just domestic supply or all water entering the grid.

--While the baseline for this indicator will remain zero, the Mission will establish the starting point for future calculations based on the loss estimate included in the 1998 CDM/PWA MIS Report. Earlier sector-wide estimates will be used as points of reference, but may be of limited value for future comparisons.

--Only sector-wide estimates are of value, since it is impossible to isolate the impact of USAID/donor activities, except on a very small scale (e.g., specific distribution systems).

I.R. 2.2, indicator 4

Volume of water conserved (mm³/yr).

Indicator Description: The indicator will reflect savings from specific technologies introduced through conservation programs (e.g. toilet flushing, shower heads, drip irrigation). Estimates could also be made based on surveys related to specific public awareness/education campaigns if appropriate.

--While we have a management interest in knowing the impact of conservation activities regardless of funding source, we have recognized that it is probably impossible to gather sector-wide data for this indicator. Likewise, an all-inclusive survey of conservation activities might prove prohibitively burdensome, and still might not produce a good estimate of water conserved. Therefore, the Mission will consider ways to limit the scope of this indicator, and may eliminate it from its formal reporting, especially since USAID-specific impact will be limited and will not occur for several years.

I.R. 2.2, indicator 5

Volume of water from non-conventional sources (mm³/yr).

Indicator Description: Non-conventional sources include imports, de-salination, brackish wells.

--It is our intent to include all uses of water from non-conventional sources (domestic and agricultural/commercial), whether or not the uses directly lead to increased availability for domestic consumers. Again, this reflects the Mission's interest in increasing access to and effective use of water resources. Part of the underlying hypothesis of the Mission's strategic framework is that more effective use for agricultural/commercial purposes is important both for economic/environmental reasons and for reasons of related to the allocation of water for domestic use.

--The Mission will consider ways to more precisely define "non-conventional sources" and the scope of activities to be included in the data (e.g., sector-wide, USAID only, USAID and "major" other-donor interventions to be identified).

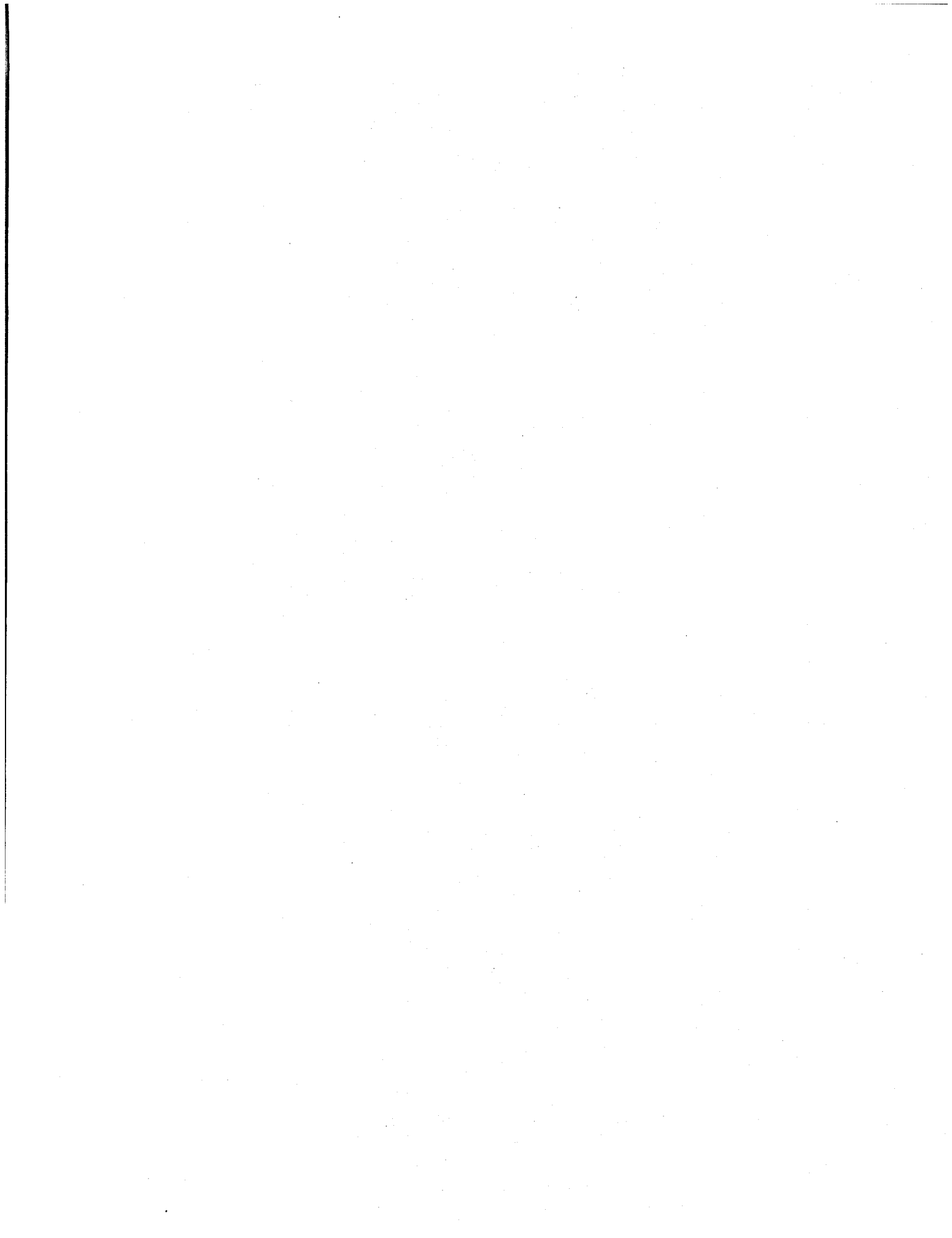
I.R. 2.3

Percent of operations and maintenance (O&M) costs recovered.

Indicator Description: N/A

--The Mission will have to consider limiting the scope of this indicator to utilities/municipalities with fairly reliable data, since it is unlikely that sector-wide data will be available for some time.

-- Indeed, while we expect to increase our efforts in this area, broad impact can not be expected for several years. Furthermore, while many of the utilities/municipalities with whom we will work may have only very rough estimates at this time, this can not preclude us from beginning to take action to address the issue of cost-recovery.



**Analysis of Indicators, Baselines, 1997 Results and Year 2000 Targets
(as reflected in the 1998 R4 submission)**

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>Strategic Objective (SO) indicator 1 Domestic consumption rate (metered) (liters/capita/day).</p> <p>Indicator Description: Based on overall domestic supply (minus physical losses and unaccounted-for use) and population estimates.</p>	<p>I B - 56 Rs - 54.5 T - 62</p>	<p>No</p>	<p>No No No</p>	<p>No No No</p>	<p>Objective - It is not clear whether certain items have been properly counted in calculating the indicator value: for instance, whether East Jerusalem is included in the calculation or not. The Mission said it was not included due to political sensitivities, but supporting information shows it is—at least in the baseline and target. Also the baseline and target are based on a contractor analysis for the whole of the West Bank and Gaza, while the 1997 result is based on information from larger water utilities only. If the Mission intends to report results only for the larger utilities, then it should change the baseline and target.</p> <p>Reliable and Supported - A contractor memo states that the baseline was <u>not complete</u> for the whole of the West Bank and Gaza but was the best it could do with the data it had collected. As mentioned above, the reported result for 1997 covered larger water utilities. While the sample is indicated to have covered 1.6 million of the presently estimated total population of 2.9 million, the sample was not designed to be statistically valid for projecting to the total population. For that matter, the information reported as 1997 results is undated but appears to be 1996 results instead. (This year's data gathering exercise will report 1997 results.) Another point of confusion is that the source of the reported result indicates only 80.4 percent of the connections as being metered. Hence, the reported result does not appear to be limited only to <u>metered</u> results, which is what the indicator purports to measure. We further note that this year's data gathering exercise does not ask for information on metered connections.</p> <p>The baseline figure is based on assumptions and estimates of: the population, the total domestic water supply, and the percentage of unaccounted-for-water (that portion of the total water supply lost due to physical leakage and administrative losses such as inaccurate meter readings and illegal connections). The reliability of this information has not been verified by the Mission.</p>

Definitions:

Objective: No ambiguity about what is being measured. The indicator is both unidimensional and operationally precise.

Reliable: Data is of sufficiently reliable quality for decision making. If the Mission did not verify the accuracy and reliability of the data, then we generally did not consider it to be reliable.

Supported: The data is supported with sufficient, competent and relevant evidence.

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
SO indicator 1 (cont'd) Domestic consumption rate (metered) (liters/capita/day)					Another point worth mentioning is that while the Mission's original strategy planned to increase per capita consumption to a minimum standard, data on per capita consumption presently is not being captured under this indicator. To estimate actual per capita consumption one needs an estimate for physical leakage separate from the overall estimate of unaccounted-for-water (since the administrative losses do not reduce the amount of water reaching the consumer). However, this year's data gathering exercise only requested information on overall unaccounted-for-water because it was considered not practical at this time to collect disaggregated data for physical and administrative losses.

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>SO indicator 2 Agricultural and commercial requirements met with nonpotable sources (percentage).</p> <p>Indicator Description: N/A</p>	<p>I B - 0 Rs - 0 T - 6</p>	<p>No</p>	<p>No No No</p>	<p>No No No</p>	<p>Objective - There is ambiguity about what is being measured. How does one define agricultural and commercial <u>requirements</u> in order to obtain consistent data each year?</p> <p>Reliable - It is not clear whether there will be a reliable data source to identify all the nonpotable water being used in agricultural and commercial settings. The source of estimates of agricultural usage is the Palestinian Ministry of Agriculture and the reliability of the estimates from that source has not been validated by the Mission. The source of the commercial usage is estimates by water utilities. However, commercial usage is not separately broken out by utilities and the reliability of the estimates has not been validated.</p> <p>Supported - As for the baseline and result, documentation indicates that it is common practice in the West Bank and to a lesser extent in the Gaza Strip to use untreated and poorly treated wastewater for irrigating crops. The Mission stated the indicator is talking about water sources that are not fit for consumption by people, but that it does not want to count untreated wastewater being used for agricultural purposes because it is environmentally unsound. While we agree that the use of untreated wastewater for agriculture is environmentally unsound, the fact remains that it presently is being used for agriculture. To the extent that such untreated or poorly treated wastewater is later replaced by treated wastewater, there will not be any increase in agricultural requirements met from nonpotable sources, i.e., what this indicator is measuring. For the results of this indicator to reflect reality, we believe that the amount of untreated and poorly treated wastewater presently used in agriculture needs to be determined and tracked and in some way accounted for in the baseline condition.</p> <p>The Mission provided an explanation regarding how it calculated the Year 2000 target. While the calculation was accurate based on the numbers it was using, as noted above, the reliability of the basic numbers for agricultural and commercial requirements has not been validated. Also, the calculation includes the targeted amount of treated wastewater directly reused as reported under I.R. 2.2 indicator 1. However, as explained under I.R. 2.2 indicator 1, that target is not supported. Therefore, we do not consider that the Year 2000 target is supported.</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>Intermediate Result (I.R.) 2.1 Volume of additional potable water from conventional sources (mm³/yr) (millions of cubic meters per year).</p> <p>Indicator Description: N/A</p>	<p>I B - 0 Rs - 0 T - 23</p>	<p>No</p>	<p>Yes No No</p>	<p>Yes No No</p>	<p>Objective - We consider that the baseline is by definition zero since the Mission is only measuring additions to the base water supply. The Mission stated that it wants to count only those sources owned by the Palestinians in this indicator. Be that the case, the indicator definition should be changed to reflect this. We initially considered that net purchases from Israeli sources should also be counted under this indicator as contractor documentation identified purchases from Israelis as conventional water sources. Net purchases from Israeli sources were not being tracked by the Mission but would appear to be a figure that needs to be captured somewhere in the Mission's results framework to have a link between the intermediate results and strategic objective indicator 1. An additional point to be clarified for this indicator is whether it is intended to measure only potable water for domestic supply or both agricultural and domestic supply. It is our understanding that the indicator is meant to measure only the increases in domestic supply. However as explained below it is not capturing all such increases.</p> <p>Reliable and Supported - The Mission explained the basis for its 1997 result and Year 2000 target but the figures did not include all the results of other donors. For example, through review of various documents prepared by the Mission's contractor and meeting with a large water utility, we identified references to at least 15 additional wells beyond what the Mission described as its support for the target. Plus there were a number of activities involving the rehabilitation of wells and springs and the conversion of existing wells to domestic uses that are not reflected in the Mission's figures although such activities would be expected to increase the amount of water for domestic uses.</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>I.R. 2.2, indicator 1 Volume of reclaimed water directly reused (mm³/yr).</p> <p>Indicator Description: Storm water and treated wastewater for direct reuse, as distinguished from such water used for aquifer recharge and indirect reuse.</p>	<p>I B - 0 Rs - 0 T - 10</p>	<p>No</p>	<p>No No No</p>	<p>No No No</p>	<p>Objective - The Mission should further define the quality level it expects treated wastewater to have in order to be counted under this indicator. We understand that a higher level of treatment is expected for direct reuse applications of wastewater than is the case for wastewater use to recharge the aquifer. The Mission told us that the Palestinians have adopted the World Health Organization standard of 30 biological oxygen demand (BOD) and 30 suspended solids (SS) as the appropriate quality level for direct reuse of treated wastewater for limited agricultural applications.</p> <p>Reliable and supported - The documentation that we saw at the Mission regarding existing treatment plants was quite limited and the reliability of the information not verified by the Mission. However, the documentation indicated that untreated or poorly treated wastewater was used for agriculture in five West Bank municipalities and unspecified areas in the Gaza Strip. The five West Bank municipalities were indicated to account for about 86 percent of the wastewater produced by West Bank municipalities or about 9.0 million cubic meters (mcm) per year, 1.3 mcm of which was indicated to receive some degree of treatment. The volumes being used for agriculture were not specified. Given the lack of definition of the treated wastewater quality level the Mission will count under this indicator, the limited and unverified nature of the information on existing treatment facilities, and lack of information on the amount of wastewater presently being used for agriculture, we do not consider the baseline and result to be reliable and supported.</p> <p>Another note is that since the purpose of this indicator appears to be to track the potable water volumes saved or freed up for other uses by using treated wastewater, it would appear that the Mission should identify and track the present use of untreated or poorly treated wastewater for agriculture even though it would not meet whatever quality standard is set by the Mission. We say this because subsequent substitution of more highly treated wastewater in applications that use untreated or poorly treated wastewater presently will not free up further potable water supplies. The results of this indicator feed into the calculation of the results for the Mission's strategic level indicator "Agricultural and commercial requirements met with nonpotable sources (percentage)". The substitution of one quality of wastewater for another in agriculture, as explained above, will not result in an increase in agricultural requirements met with nonpotable sources.</p> <p>Regarding the Mission's Year 2000 target, we noted that the Mission only has firm data on the activities it is funding, and those activities do not involve enough wastewater volume to account for the assumed volumes shown as targets under I.R. 2.2, indicators 1 and 2. There are other donors' projects in process that may contribute to the results of I.R. 2.2, indicators 1 and 2, but the Mission had not visited those projects to get</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>I.R. 2.2, indicator 1 (cont'd) Volume of reclaimed water directly reused (mm³/yr).</p>					<p>the specifics on the volume of wastewater processed, the level of treatment, the expected treated water quality, the dates by which the higher quality levels are expected to be reached, and the expectations regarding how much of the treated wastewater will be directly reused. Therefore, the Mission lacks reliable information on the degree to which other donors' projects will contribute to I.R. 2.2, indicators 1 and 2.</p>
<p>I.R. 2.2, indicator 2 Volume of reclaimed water used for aquifer recharge (mm³/yr).</p> <p>Indicator Description: Storm water and treated wastewater for aquifer recharge and indirect reuse, as opposed to direct reuse.</p>	<p>I B - 0 Rs - 0 T - 10</p>	<p>No</p>	<p>No No No</p>	<p>No No No</p>	<p>Objective - Along the same lines as I.R. 2.2, indicator 1, the Mission should clarify the definition of the indicator to state what it is talking about in terms of treated wastewater quality. The Mission told us that a 45 BOD/45 SS level of quality is needed in order to use wastewater for recharging the aquifer. Higher levels of BOD and SS were said to plug up the soil and limit infiltration of the wastewater into the aquifer.</p> <p>Reliable and Supported - The Mission indicated that it does not intend to count the aquifer recharge naturally occurring from the discharge of untreated wastewater. We see no effect from not counting such recharge since the results from this indicator are not used in the calculation of the results for higher level indicators.</p> <p>Documentation indicates that three West Bank and three Gaza Strip municipalities have operating wastewater treatment plants, although they are indicated to be overloaded or not operating properly. So there would be naturally occurring recharge from some of these plants although the effluent probably is of poor quality. Depending upon the quality level the Mission adopts for this indicator, there might or might not be amounts to count under this indicator's baselines and results. Further the information that we saw at the Mission regarding existing treatment plants was quite limited and the reliability not verified by the Mission. Given the lack of definition of the effluent quality level the Mission will count under this indicator and the limited and unverified nature of the information on existing wastewater treatment facilities, we do not consider the baseline and result to be reliable and supported. Further, as noted under I.R. 2.2, indicator 1, the Mission does not have information on other donors' projects, but part of the results needed to reach the Mission's target will need to come from other donors' projects. Therefore, we consider that the target also is not supported.</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>I.R. 2.2, indicator 3 Volume of losses prevented (mm³/yr).</p> <p>Indicator Description: Rate of losses (physical and unaccounted for use) estimated at approximately 43 percent in 1996. System-wide data will be developed by multiplying the reduction in rate of losses to the total supply. Activity-specific data will also be tracked, as appropriate.</p>	<p>I B - 0 Rs - 0.2 T - 4</p>	<p>Yes</p>	<p>No No No</p>	<p>No No No</p>	<p>Objective - Based on our review of documentation, we are aware that this indicator is only counting losses associated with the domestic water supply. Different loss percentages apply to agriculture. However, the Mission should clarify this point for the benefit of those who have not read the documentation. To better understand this indicator, one needs to be aware that only physical losses reduce the volume of water reaching the consumer. The remainder of unaccounted-for-water is due to inaccurate meter readings and illegal connections—something to be minimized to increase the volumes that can be billed by the water utility, but not water lost to the consumer.</p> <p>Reliable - The baseline value of zero indicates that the Mission is attempting to measure improvement from the actual baseline condition. However, to measure improvement in this case one needs to know what the actual unaccounted-for-water percentage was at the beginning of the strategy, and the reliability of that information is uncertain. The baseline value of 43 percent was supplied by the Mission's contractor and was based on estimates by water utilities or estimated from published data and/or discussions with water utility personnel. The reliability of these estimates and data was not determined. Different surveys have given somewhat different estimates for the percentage of unaccounted-for-water and the Mission indicated that baselines/targets should not be finalized until a reasonably reliable and consistent source can be cited, e.g., the Palestinian Water Authority's management information system which the Mission is supporting.</p> <p>Supported - The 1997 results reported by the Mission include only USAID-funded activities. The results of other donors financing work to improve the water distribution systems are not included.</p> <p>The Year 2000 target is based on a contractor assumption that loss rates will be reduced over a twenty-year period as a result of the water supply system being upgraded and adequately maintained. This is just an assumption and does not provide a realistic basis for projecting this indicator's Year 2000 target.</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>I.R. 2.2, indicator 4 Volume of water conserved (mm³/yr).</p> <p>Indicator Description: The indicator will reflect savings from specific technologies introduced through conservation programs (e.g. toilet flushing, shower heads, drip irrigation). Estimates could also be made based on surveys related to specific public awareness/education campaigns if appropriate.</p>	<p>I B - 0 Rs - 0 T - 4</p>	<p>Yes</p>	<p>Yes No No</p>	<p>Yes No No</p>	<p>Objective - We consider that this indicator intends to measure conservation increases resulting from specific interventions—not total improvement for all of West Bank and Gaza. If the latter were the intent then we would consider the indicator to be flawed since there is no reliable baseline and no sector-wide data source to measure improvement against the unspecified baseline.</p> <p>Reliable - Since this indicator will be based on specific interventions, it is important that the Mission be able to reliably identify and get information on all the interventions of other donors and the Palestinians themselves that might contribute to the results under this indicator. However, as noted previously under other indicators, the Mission does not have an effective system for getting such information. Therefore, we scored the 1997 result and Year 2000 target as unreliable. On the other hand, we consider the baseline to be zero by definition.</p> <p>Supported - The Mission did not have support for the 1997 result or Year 2000 target. For example, the Mission said there are no specific plans that support the Year 2000 target. Rather, the number was picked based on the Mission's general expectation that other donors would focus on the area.</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
<p>I.R. 2.2, indicator 5 Volume of water from non-conventional sources (mm³/yr).</p> <p>Indicator Description: Non-conventional sources include imports, desalination, brackish wells.</p>	<p>I B - 0 Rs - 0.2 T - 8</p>	<p>No</p>	<p>Yes Yes No</p>	<p>Yes Yes No</p>	<p>Objective - The Mission should clarify what nonconventional use of brackish water it intends to capture. It is our understanding that the Mission intends to count brackish water used directly in applications normally satisfied from potable water sources, e.g., commercial uses that do not need drinking quality water. The Mission should also precisely define imports since the Mission indicated that the imports it is talking about are major purchases of water from the Israelis which the Israelis agreed to supply under the Oslo II accords. We do not know what methodology the Mission would propose for separating purchases from the Israelis under the Oslo II accords from other Israeli purchases. (About a fourth of the present Palestinian domestic water supply is purchased from the Israelis.) This is an area that needs clarification to prevent counting normal purchase volumes as imports.</p> <p>Reliable - We consider that this indicator intends to measure additional water and therefore the baseline is zero by definition. Although there likely will be relatively few nonconventional water systems, we note that the Mission does not have a good record of keeping abreast of other donors' activities. For example, even though the Mission visited an Italian desalination plant in the Gaza Strip, it apparently was not aware that the Italians planned to build five more. Therefore, we scored the Year 2000 target as not being reliable.</p> <p>Supported - The 1997 result is based on an Italian desalination plant in Khan Younis which the Mission visited in February 1998. In regard to the Year 2000 target, the Mission did not identify projects that support the target. It would appear that if "imports" is to include purchases of Israeli water under Oslo II, then the target should be higher, and if such purchases are not to be counted, the target should be lower.</p>
<p>I.R. 2.3 Percent of operations and maintenance (O&M) costs recovered.</p> <p>Indicator Description: N/A</p>	<p>I B - TBD Rs - * T - 100</p> <p>* Space left blank in the R4. Performance monitoring plan states, "no data available."</p>	<p>No</p>	<p>No No No</p>	<p>N/A N/A No</p>	<p>Objective - As the Mission has no information source for cost recovery on a sector-wide basis at this point, perhaps the Mission should restrict the definition of this indicator to include only those water utilities that it polls in its annual data gathering exercise.</p> <p>Reliable - The Mission expects to obtain information on this indicator as part of this year's data gathering exercise. However, based on our review of the process thus far, we consider that further work will need to be done to validate the information once it is received. Until that validation is done, we do not believe that the information obtained can be considered reliable.</p> <p>Supported - Comments in the R4 indicate that the Mission has no expectation of achieving 100 percent recovery of O&M costs by the Year 2000. Rather, the Mission is waiting for the information from this year's data gathering exercise before deciding whether to change the indicator or set a more realistic target.</p>

Indicator	Indicator = I Baseline = B 97 Results = Rs Target = T	Objective	Reliable	Supported	Comments
"Yes" Totals	I B Rs T	2	3 1 0	3 1 0	
"No" Totals	I B Rs T	7	6 8 9	5 7 9	
"N/A" Totals	I B Rs T	0		1 1 0	