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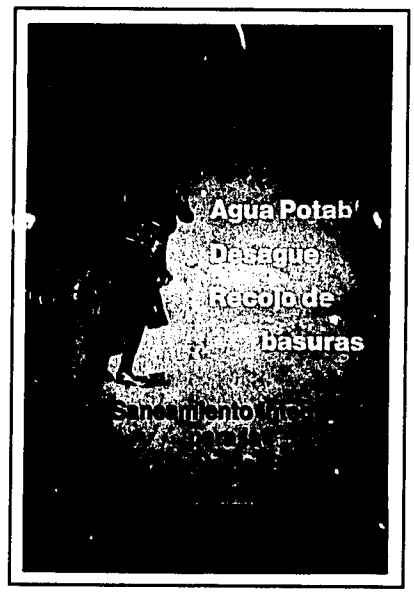
September 1991

WATER AND SANITATION for HEALTH PROJECT

1992 Annual Work Plan



WATER AND SANITATION
for HEALTH PROJECT
Sponsored by the U.S. Agency
for International Development

WATER AND SANITATION
FOR HEALTH PROJECT
Operated by CDM and Associates

Sponsored by the U.S. Agency
for International Development

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30 September 1991

John H. Austin, Ph.D.
Agency for International Development
Bureau for Research & Development
Office of Health
Room 702, Building SA-18
Washington, DC 20523

Dear Dr. Austin:

In accordance with the terms of our contract no. DPE-5973-Z-00-8081-00 effective 1 October 1988, we are pleased to submit the Fiscal Year 1992 Annual Work Plan for the WASH III Project.

We wish to take this opportunity to thank your office for the support and guidance provided during the preparation of this document. We look forward to working with you to implement the tasks presented herein.

Very truly yours,

J. Ellis Turner
WASH Project Director

JET:kf

cc: Lori Doheny, M/SER/OP/W/HP

September 1991

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Operated by CDM and Associates
Camp Dresser & McKee International, Inc.
Associates in Rural Development, Inc.
International Science and Technology Institute
Research Triangle Institute
Training Resources Group
University of North Carolina at Chapel Hill
University Research Corporation

WATER AND SANITATION for HEALTH PROJECT
Sponsored by the U.S. Agency for International Development

Senior Advisory Consultants

Cover Photos:

Upper left: Cholera prevention poster, Peru, Spring 1991 (photo by Joseph Haratani and Donald Hernandez). Upper right: Solid waste dump outside of Manila, Philippines (J. Ellis Turner). Lower right: Hypochlorite dosing device, Regional Hospital, Piura, Peru, Spring 1991 (Joseph Haratani and Donald Hernandez). Lower left: Refugee arrival at Zaku, Iraq, April 1991 (Terrance M. Rahe).

Water and Sanitation in the News

The WASH Project looks ahead to fiscal year 1992 with a sense of excitement and a feeling that the pace of progress is picking up in the water and sanitation sector. Such optimism may seem unwarranted in view of the critical water and sanitation situation in many developing countries. The problems are familiar: growth in population and urbanization have outstripped the ability of governments to extend service, in many areas the water supply is polluted, resources for the sector—financial, institutional, and human—are in short supply, and so on. Why does such a critical situation generate optimism? The short answer is that, for the first time in a long time, water and sanitation have become front-page news in the world press, calling attention to problems and issues that many people were not aware existed or have chosen to ignore.

I.

"Cholera is making its first major visit to the Western Hemisphere in the 20th century. Its explosive spread—158,000 cases in Peru in three months—has focused attention on how millions of Latin America's city dwellers make do with sewage and drinking water facilities reminiscent of 19th-century Europe."
—New York Times

Cholera has been a big news item in FY91. Its reappearance in Latin America almost 100 years after the last epidemic caused alarm. Newspaper stories about the outbreaks in Peru, Ecuador, Colombia, Chile, Mexico, and elsewhere read like WASH reports about the dangers of contaminated water and have made the public aware of just how many of the world's people are without a safe supply of water and adequate sanitation. Cholera is endemic in Asia and Africa, where the death toll is greater than elsewhere because the health infrastructure is less-developed and lacking in the capacity to treat those who come down with the disease and to carry out prevention programs.

Ironically, without the cholera crisis, information about the health risks that many face from lack of water and sanitation would probably not have appeared in the newspapers, although the death toll from cholera in Latin America is only a fraction of the toll exacted by childhood diarrhea every day in the developing world.

The story of cholera's reemergence in Latin America is a story of pay-me-now or pay-me-later. Because of past neglect, governments will now have to pay large sums to control the spread of the disease and to treat the victims until safe water and adequate sanitation are the norm rather than the exception. The presence of cholera carries a high price in economic losses also, mainly from a decline in the sale of fish and farm produce and a drop in tourism. This epidemic provides proof, if any is needed, that stop-gap measures eventually fail; and planners must take a much longer-range perspective.

In its cholera interventions, WASH assists in short-term interventions and recognizes their importance but emphasizes prevention and long-term solutions. In March WASH

sent a team of consultants to Peru, where the epidemic first surfaced, to assess the country's water-supply deficiencies, the resources available for addressing the epidemic, and short- and long-term measures that could be taken. As a follow up to the assessment representatives from all concerned Peruvian ministries and from external support agencies active in the region gathered in a workshop in Lima to produce an intersectoral master action plan for coping with the outbreak.

WASH has received a buy-in from the Bureau for Latin America and the Caribbean for ongoing technical assistance in cholera prevention. It is likely that the Peru model—a rapid assessment followed by coordinated intersectoral planning—will be used in other countries.

One of the first proactive tasks to be launched in FY92 is a refinement of practical interventions for preventing the spread of the disease. Improving water quality and quantity and sanitation, bringing about changes in hygiene behavior, and treating wastewater are elements of such a prevention program. The final report of this activity will be used as the raw material for a Technical Note on Cholera Prevention.

Cholera is not going to go away any time soon in Latin America. Water and sanitation coverage figures show why. In 1989, for example, 41 percent of urban and 82 percent of rural dwellers were without sanitation. Forty percent of Lima's residents do not have accessible to potable, piped water; 40 percent of Brazil's 150 million people do not have access to sewers. In most large Latin American cities raw sewage is dumped into the oceans or rivers or is used untreated for irrigating farmland. It is to be hoped that the new interest in water and sanitation prompted by the cholera epidemic will be sustained and that lasting improvements will bring about a permanent end to this costly disease and the many other water-related diseases that threaten people who lack safe water and adequate sanitation.

II.

> *" 'More and more teachers are trying to help children understand that caring for their environment should be an everyday part of their lives,' said the president of the Connecticut Outdoor Environmental Education Association.... 'Since they'll be inheriting so many of the problems, they unfortunately aren't going to have much of a choice.' "*
>
> —New York Times

An upsurge of interest in the environment is probably responsible, more than any other phenomenon, for the sense of excitement and optimism in the water and sanitation sector. In the first five months of 1991, the *New York Times* index listed over 100 stories under the heading "water pollution;" scores more were listed under "environment." Stories ranged widely. Oil spills led the list along with dumping medical wastes, toxic chemicals, and sewage (sometimes treated, sometimes not) into the ocean. There were reports on scientific advances in clean-up technologies, on enforcement of environmental laws, on how under-regulated urban development strains water and sanitation systems, and on industries' attempts to reduce air and water pollution.

Environmental problems are not restricted to developing countries; they affect everyone. An environmental problem in one area can affect people far way. In the United States, where virtually full coverage in water and sanitation was achieved 75 years ago, new problems of water scarcity and water pollution are appearing. Citizens in many areas are beginning to worry about water shortages like those in California. Americans are finding out more about how toxic waste dumping, chemical-based fertilizers, and irrigation can threaten groundwater and surface water sources. Recycling centers are sprouting up; bottled water sales are brisk. The unsettling news from Eastern Europe and the Soviet Union about the effects on the environment and on human health of unrestrained industrialization have forced Americans to think seriously about how environmentally sound development can be promoted. In a broad sense, more and more people from all regions of the globe realize that resources they once thought of as almost inexhaustible are finite. Even the vast oceans are polluted.

Developing countries are being encouraged to consider the environmental ramifications of their development activities from the outset and, building on lessons learned the hard way by the United States and other industrialized nations, to incorporate more creative, appropriate ideas and strategies into their plans. As a result of this consciousness-raising about the environment, water and sanitation issues also have a higher profile.

How water supplies are developed, used, and protected has wide ecological ramifications. Many sector planners are now looking at water and sanitation activities not in isolation, but as an integral, vital part of environmental management. "Water and sanitation" have broken out of their old defining boundaries. "Sanitation" comprises not just wastewater treatment and disposal and latrine building but the more "modern" problems of solid waste disposal, the treatment and handling of industrial and toxic wastes, and the handling of run-off and drainage, especially in peri-urban areas. "Water supply" encompasses the development of water supply systems plus water conservation, pollution control, watershed management, water-resource monitoring, and so on.

Today there is a greater willingness than ever on the part of the donor community to devote resources to solving environmental problems, as these problems become more obvious and more urgent, and that is cause for optimism.

WASH begins FY92 with considerable experience in providing technical assistance in environmental management, as the following examples attest:

- *Water Management Study.* WASH completed a series of tasks in Oman for the Omani-American Joint Commission to help the Ministry of Water Resources improve Oman's water management capabilities. Oman is faced with such problems as saltwater intrusion in aquifers and the depletion of certain aquifers through unregulated extraction.

- *Solid Waste.* In Haiti, WASH assisted the government to address the problem of solid waste management in the capital city through privatization. A survey to determine the current scale of private sector involvement and the size of the market for compost was

conducted and assistance provided to the government to help establish a private-sector mechanism and regulatory framework for solid waste collection in Port-au-Prince.

- *Water Reuse.* WASH and the U.S. Environmental Protection Agency are working on a revised edition of the Guidelines for Water Reuse published eleven years ago by the EPA. The new guidelines will cover developing- as well as developed-country applications. This is the first collaboration between WASH and EPA.

- *Contamination of Water Resources.* The Government of El Salvador and a number of local PVOs are collaborating to address the problem of environmental contamination in the country. This problem has worsened in the last decade and now threatens the poor with increased living costs because of the scarcity of potable water. WASH consultants are evaluating the status of surface and groundwater contamination in selected waterways in southwestern El Salvador.

During 1991, WASH assisted A.I.D.'s efforts to redefine its environmental focus. A consultant team from WASH designed and facilitated a retreat for members of A.I.D.'s Environmental Working Group at the end of April. In February, representatives from WASH participated in a workshop organized by the Office of Health to discuss the office's environmental health initiative.

In WASH planning meetings for FY92, WASH staff put the environment at the top of its priority list for proactive tasks. Consequently, next fiscal year, the major proactive task will examine various options for wastewater and solid waste management in industrialized countries and devise an assessment tool for choosing among the options. The high-tech, regulatory approach to wastewater and solid waste management in developed countries is not the only valid approach and is not likely to be successful in developing countries, if for no other reason than they cannot afford such systems. There are other good alternatives, including those that utilize the private sector and develop incentives for people to act.

One of the most challenging field-based tasks for FY92 will be the Danube River Basin study, a task just underway. A.I.D. is assisting four Eastern European nations and numerous bilateral and multilateral agencies to develop a plan of action for improving the water quality of the Danube River and for conserving key ecological areas in the Danube River Basin, which remains under heavy pressure from agricultural, industrial, and urban development activities. WASH's role in the study is to collect data on point-source discharges into the river and to find out what governmental administrative and finance authorities are now responsible for regulating river use in Hungary, Bulgaria, Romania, and Czechoslovakia. This data will be used in devising a Danube River Basin Environmental Program. It will be one of the first steps in cleaning up the Danube.

Also in FY92, WASH consultants will prepare environmental guidelines to be used by private voluntary organizations (PVOs) in the Dominican Republic in the design of small

rural and urban water and sanitation projects. A.I.D. will finance approximately 35 such projects if they promote environmentally sound development.

III.

"Although three-quarters of the globe is covered by water, 97 percent of it is salty and cannot be used without expensive desalinization treatment. Of the remaining 3 percent that is fresh, almost 78 percent is frozen in ice and snow. That leaves less than 1 percent of the earth's water for human use, and that is very unequally distributed around the globe." —Newswatch

Among the most arresting newspaper reports in the past year are some back page stories about regional political tensions arising over access to ever dwindling supplies of potable water. Most people are used to thinking about water as a scarce resource that must be managed carefully so that it can be made available at an acceptable cost. An important feature of water resources management is taking a regional—or sometimes even global—approach and analyzing all uses of water and their cost-effectiveness as a basis for planning. Such planning should start now while demand still does not generally exceed supply in most regions—while the problem is scarcity and not depletion.

Current and planned WASH activities demonstrate A.I.D.'s interest in increasing the accessibility of water and safeguarding supplies for everyone. In FY91, a WASH staff member participated in a conference sponsored by ISPAN (the Irrigation Support Project for Asia and the Near East), an A.I.D. resource, on developing a water resources strategy for the Near East and Asia Bureaus to guide A.I.D. investment in the water sector. The purpose of the strategy is to lead A.I.D. and country missions along a logical path in thinking about the economic consequences of decisions made about water resources development, including assessing competing intra- and cross-sectional demands for water resources. It covers such subjects as water scarcity, water pricing, market failure in water supply, user conflicts, and so on.

Many of these topics have not generally been part of the planning of water projects. While WASH participation in this effort was modest, it is mentioned here to show that there is a trend toward more careful economic scrutiny of water projects from a regional vantage point.

If the resources are to be found to provide water and sanitation to the millions still unserved, it will be as a result of taking a much closer look at the financial viability of projects. If water and sanitation systems are not financially viable, service deteriorates and coverage cannot be expanded to poor clients.

In FY92, WASH will develop an analytical framework to address the important water supply and sanitation issues of the 1990s within the context of financial viability. The framework will discuss financing strategies given today's economic realities: external debt ceilings, environmental degradation, increased urbanization, continued heavy reliance on

external financial sources, the inability of sector institutions to implement rationing and effective pricing policies, difficult trade-offs to achieve equity, and so on.

A number of these issues surfaced during a three-month investigation in FY91 of the possibilities for private sector participation in the provision of urban water supplies in Indonesia. A multidisciplinary team made up of Indonesians and WASH consultants, including engineers, financial analysts, specialists in public policy and administration, and legal experts concluded that private sector participation was feasible in Indonesia only if the government set up the appropriate regulatory framework, provided certain financial guarantees, and made it clear how private sector enterprises would interact with local government entities.

Like newspaper stories about the environment, water scarcity or "water wars" stories have raised the public's consciousness about a problem that cannot be ignored. As the *Newswatch* article quoted above states, "The precious liquid cannot be physically distributed equally around the world" but water problems can be addressed through legislation requiring greater efficiency—especially in irrigation, re-assessing subsidies, instituting environmental controls, transferring technologies to developing nations, and a whole host of management strategies.

IV.

"Swenson came across death daily in the [Kurdish refugee] camps...He saw children collapse in their mothers' arms, killed by bacteria-laden water.... After two weeks assessing the camps, Swenson concluded that for the refugees to survive, they would have to leave the mountains to where they could get clean water and proper sanitation. A flat area in Northern Iraq was chosen."
—Auburn Journal

WASH environmental health consultants Richard H. Swenson and Terrance M. Rahe were part of the Disaster Assistance Response Team (DART) sent to Turkey and then on to Iraq by A.I.D.'s Office of Foreign Disaster Assistance (OFDA) to assist the Kurdish refugees. Swenson participated from April 8 to 27 and Rahe from April 19 through May 16. Swenson's experiences there were covered in his hometown newspaper, from which the above quotation is taken. The DART found 30,000 to 70,000 displaced Kurds in the area of Isikveren, Turkey, a small village in a mountainous area at an elevation of 6,500 feet—just one of numerous refugee sites. The situation of the refugees vis-a-vis water and sanitation was dire. There were no latrines; people were forced to defecate in the open; no adequate supply of water was available. Ninety-nine percent of the population had diarrhea and many deaths from dehydration were reported.

While arrangements were being made to relocate the population to an area where basic water and sanitation services could be provided, temporary measures were undertaken to increase the amount of water hauled into the camp and to isolate defecation areas. Swenson and Rahe worked together to develop a water and sanitation plan for the temporary community that could be a model for other communities. The plan that

Swenson developed was responsive to Kurdish cultural practices: in particular their clan social structure and the unwillingness of men and women to use the same latrines. In constructing the camp, water was assigned the highest priority (first quantity and then quality), sanitation in the form of latrine construction came next, and solid waste disposal was third.

The approach taken by the WASH consultants in the Kurdish refugee emergency reflects what WASH has learned about the relationship between water and sanitation and health and the factors that make for systems that last over the long term.

Since FY90, WASH has been examining the health effects of water and sanitation to look for clues as to the best way to spend the w .ter and sanitation dollar. Although the beneficial health effects of water and sanitation are presumed to be substantial, information is lacking on the relative benefits of various possible interventions. Some interesting findings have come out of these WASH-sponsored investigations, findings that have clear implications for sector programming.

A FY90 report by Steven Esrey examined 144 studies of the impact of water and sanitation on certain water-related diseases and found that on average the studies showed that water and sanitation interventions brought down morbidity considerably. In the case of guinea worm disease, the median reduction was 78 percent, for diarrheal disease 26 percent, for schistosomiasis 77 percent, to give a few examples. The report also found that the quantity of water available to users was more important than the quality of water, a counter-intuitive finding, and that sanitation (in the sense of proper disposal of excreta) was more important than water supply as far as health impact was concerned.

In line with these conclusions, WASH believes that more resources should be put into sanitation to correct what has been a long-standing imbalance in favor of water supply. At the beginning of the decade of the 1990s, 85 percent of rural, and 37 percent of urban dwellers in developing countries were without access to adequate sanitation. In FY92, WASH will conduct a workshop and prepare a paper analyzing the current program of disposal of human excrement and local or household drainage in the growing peri-urban areas of developing countries. The task should result in a state-of-the-art statement on what we know and what we don't know and set the agenda for future work and research.

In FY91, to continue the research effort initiated with the Esrey report, a new study was carried out. It used data collected in 1987 under the auspices of the Demographics and Health Surveys (DHS) Project on 2,008 children aged 6 to 36 months in Guatemala. The study was designed to test several hypotheses about the relative health benefits of water and sanitation, rural urban differences in such benefits, and the significance of community-level versus family-level sanitation efforts. Stunting, defined as height for age more than two standard deviations below the reference median of the World Health Organization, was used as the measure of health.

The study found that children who lived in communities with poor sanitation were twice as likely, on average, to suffer from stunted growth as those who lived in communities with a high level of sanitation. Furthermore, the presence or absence of a flush toilet in the home had a lesser impact on stunting than the level of community sanitation.

Children who lived in communities with a high level of sanitation, even if they had no individual access to a toilet, were less likely to be stunted than children with toilets who lived in a community with a low level of sanitation. These rather remarkable findings about community-level sanitation are plausible when it is realized that how everyone else in the community disposes of their feces is important to an individual's health. In other words, for the transmission of disease, the feces of an individual are not dangerous to that same individual. It is his or her ill neighbor who may transmit disease.

The authors of the study hypothesized that sanitation would be more important in urban areas where crowding is often a problem, but the findings did not bear that out. The study found that improved sanitation is just as important from a health standpoint in rural as in urban settings.

These findings provide two clues for sector programming, where health improvement is expected as an outcome: the first is that sanitation should receive the same amount of attention as water supply, and the second is that programs should concentrate not so much on improving the individual level of service, but on reaching a high enough level of community sanitation so that at least 75 percent of the inhabitants have access to adequate sanitation services and use them properly.

By implication, these conclusions confirm the importance of community participation and hygiene education, key elements of the WASH approach and a subject receiving a great deal of attention in the water and sanitation community. In FY91, WASH participated in a five-day workshop hosted by the London School of Hygiene and Tropical Medicine at Oxford University on methods of obtaining information about the water and sanitation-related behaviors of people in various national, ethnic, religious, and economic subgroups. Such information is needed for designing effective hygiene education programs. Participants agreed that the first revolution in water and sanitation for developing countries was in designing appropriate pumps and latrines; the second revolution will be in understanding how to bring about positive changes in human behavior.

A new proactive task for FY92 on assuring hygiene behavioral change is the natural extension of the Oxford workshop and many other previous WASH activities. The goal of the new task is to help managers of water supply and sanitation programs to translate broad recognition of the key role of behavioral change into effective management strategies for achieving that change. Bringing about changes in hygiene behavior has proved to be more difficult and complex than planners first thought it was. This task will try to identify the key management issues in implementing a project in which behavior change is a primary focus.

WASH guidelines on methods of rapid environmental health assessment now in preparation, "Better Information for Better Decisions," is a tool that can be used to collect information important to planners of projects with a health emphasis. Several methods for obtaining information about morbidity and mortality, health practices, and the effectiveness of health interventions are outlined in this guideline to help planners decide which methods are appropriate in which situation. Rapid epidemiological methods are especially appropriate in peri-urban areas where the need for reliable information is critical.

The Kurdish refugee emergency brought into stark relief the health dangers posed by lack of water and sanitation. When there was no safe water and no sanitation, virtually everyone had diarrhea. When water was provided—first quantity, then quality—and when culturally appropriate sanitation facilities were built, the incidence of diarrhea diminished rapidly. In the Kurdish refugee camps, many organizations pooled their resources in an all-out effort to solve the problems. Unfortunately, developing country communities do not receive that kind of "emergency" treatment. They must work for solutions amid the complications of competing priorities. It is hoped that WASH's work in environmental health and hygiene education will help governments to plan and to set priorities for water and sanitation projects with a high health payoff.

V.

"In 1980, the United Nations...christened the years 1981-1990 'The International Drinking Water Supply and Sanitation Decade.' Representatives from 115 countries met in New Delhi in September 1990 under the banner 'Safe Water 2000' to wrap up the campaign and assure its success.... While some 730 million people gained access to water and 415...to sanitation, 1 billion citizens of developing countries (excluding China) still lack clean water and 1.8 billion lack adequate means of waste disposal."
—Newswatch

The end of the Water Decade in 1990 was the occasion for "soul searching" on the part of developing country government officials and external support agencies. The Decade began with the slogan "clean water for all by 1990." By mid-Decade it was clear that that goal was unrealistic. To some extent the lack of significant progress in extending coverage was beyond the control of sector agencies and organizations: the 1980s saw the end of economic expansion—in fact, many countries experienced negative growth; population continued its rapid growth, migration to urban areas proved to be unstoppable. Too much of an emphasis on the numbers—on covering as many people as possible as rapidly as possible—paradoxically led to programs that did not hold up over time.

At the same time, a great effort was put forward during the ten years, and, while that effort didn't achieve clean water for all, it did achieve increases in coverage in all regions and many advances, such as the development of low-cost technologies, new techniques for promoting community-level operations and management, recognition of the role of the private sector, more attention to the rural poor, an appreciation for the importance of hygiene education, more involvement of women, better management practices for sector institutions, and so on. The Decade was a success for millions of people and a tremendous learning experience.

As the 1990s get underway, WASH and many other organizations and sector agencies are trying to absorb the lessons of the Decade and to develop strategies based on the Decade's achievements and lessons, as the following descriptions of FY91 tasks and tasks planned for FY92 show.

Sustainability and Decentralization. WASH initiated two key proactive tasks in FY91: one on sustainability and the other on decentralization. Both tasks attempt to examine more closely issues raised during the Decade. The first phase of the sustainability task is to analyze factors that determine sustainability; its second phase is to conduct evaluations of completed projects in several countries to see what role the factors seemed to play. The goal of the decentralization task is to help developing country governments that are planning to decentralize but lack information about how to carry it out. A report will be prepared containing some general guidelines and possible models and approaches.

Collaboration. With resources in short supply, collaboration and coordination of efforts is vital. In FY91 WASH worked collaboratively with the Peace Corps in guinea worm control activities; with the African Development Bank on guidelines for planning and implementing water and sanitation projects; with the International Secretariat for Water on the publication of a French version of the popular WASH document, *Lessons Learned*; and with the International Center for Diarrheal Disease Research, (ICDDR,B). WASH also took on the task of coordinating the Global Applied Research Network (GARNET) in collaboration with the UNDP/World Bank Water and Sanitation Program. GARNET, a decentralized, informal network of research centers, aims to provide better access to information on applied research for developing countries.

Also in FY91, the director of WASH participated in a joint UNDP/World Bank mission to prepare a collaborative program of technical assistance for the Central American countries of El Salvador, Guatemala, Honduras, and Nicaragua. The seven-person team included representatives from UNICEF, PAHO, WHO, and the UNDP/World Bank, as well as WASH. The mission outlined a plan of action based on the following principles: providing basic services to the poor is first priority, collaboration among national and external donor organizations is the byword, basic elements of sustainability should be stressed, and collaboration should be voluntary and designed to strengthen country-level activities. At present a regional coordinating unit is being established in Guatemala City.

Water and Sanitation Problems of Peri-Urban Areas. Peri-urban issues took on more and more urgency as the Water Decade progressed. During that 10-year period, the urban population of developing countries increased by 256 million. Most of these people settled in urban-fringe areas. Accordingly, WASH has put peri-urban issues high on its agenda. In FY92, two proactive tasks address this issue directly. The first, which concerns sanitation needs in peri-urban areas, has already been described. The second concerns the constraints of the formal sector in reaching the urban poor of the informal sector. The water and sanitation needs of peri-urban

dwellers are great, but formal sector institutions—such as municipalities, sector agencies, and financial institutions—are often structurally and legally constrained from intervening in informal sector communities. This task will try to find out what these constraints are and will suggest ways to build bridges between formal institutions and informal communities.

Institutional Development. The principal problem in many developing countries is a lack of institutional capacity—water institutions, skilled personnel, management systems, appropriate policies—to plan and implement water supply and sanitation systems. Assisting developing countries to build up their institutional and human resources is a major WASH activity. A very large proportion of mission requests are for technical assistance in institutional capacity building. Ongoing long-term institutional development efforts are underway in Sri Lanka, Tunisia, Ecuador, Indonesia, and Oman and with the African Development Bank. Preliminary requests for similar assistance have been received from Egypt, Belize, and Jamaica for FY92. Some collaborative efforts with the World Bank might also take place.

Interdisciplinary Approach. If anything was learned during the Decade it was that hard and soft technologies go hand in hand: the anthropologist who understands the hygiene practices of certain ethnic or religious groups is just as important as the engineer who designs the supply system, or the trainer who trains the village water committee members, or the economist who carries out a willingness-to-pay study. WASH technical assistance is normally provided via an interdisciplinary team of consultants who have to work together productively and with an appreciation for their respective roles. In FY92 WASH will develop a set of guidelines for use by such teams. It will cover the issues that need to be addressed, the necessary ingredients for success, potential problems or pitfalls, and ways to create the conditions for success. The guidelines can be thought of as an extension of the WASH team planning methodology which is now well institutionalized in WASH.

* * *

In the mid-nineteenth century cholera epidemics frightened authorities in New York and London and other cities into creating health boards which built water and sanitation systems in spite of the protests of taxpayers and property-owners that such systems were too expensive. The fear of cholera gave reformers the leverage they needed. Today, lack of adequate water and sanitation and a whole host of environmental problems unheard of in the nineteenth century give us more to fear than cholera.

It is just possible that as the twentieth century draws to a close, our fears will again prompt greater action and commitment and keep water and sanitation in the news.

A.I.D., through the WASH Project, provides assistance to attack both long-term and short-term problems but the emphasis is on long-term issues and sustainable water and sanitation systems, wise development of water resources and protection of the world's water supply, sanitation and hygiene education, building strong sector institutions, and attention to the generally overlooked problems of cost recovery, financial planning, and the generation of investment capital for water and sanitation. The tasks described in this annual plan reflect this emphasis.

A summary of the use of FY92, R&D/Health core funds is presented below:

TASK CATEGORY	AMOUNT
Section I:	
General Administration	$ 808,500
General Technical Assistance	189,000
Annual Plan and Proactive Task Development	170,000
Information Services	147,000
Liaison and Coordination	162,000
Task Development for Mission and Bureau Requests	125,000
Preparation and Dissemination of Information on WASH	40,000
Subtotal	**1,641,500**
Section II:	
Mission and Bureau Requests	466,400
Subtotal	**466,400**
Section III:	
Proactive Tasks	392,100
Subtotal	**392,100**
TOTAL	**$2,500,000**

SUMMARY OF FY92 ANNUAL PLAN

The WASH III FY92 Annual Work Plan was developed following the planning meeting in June 1991. The annual planning meeting had the active participation of representatives from the Bureau for Research and Development, Office of Health of A.I.D. The Plan is divided into three sections and an annex. Sections I through III of the FY92 work plan include a total of 59 tasks with an estimated cost of $2,500,000.

The categories of the plan consist of the following:

1. **Operations Center Tasks (Section I):** These 14 tasks (consolidated below) are necessary for the technical management, information support, promotion, task development, liaison, and administration of the WASH Project independent of the magnitude of specific mission and bureau, and proactive tasks and levels of effort.

2. **Mission/Bureau Requests (Section II):** There are 31 tasks based on requests received from A.I.D. missions and bureaus. In addition, a reserve is set aside for unidentified future requests for technical assistance.

3. **Proactive Tasks (Section III):** There are 14 new initiatives proposed by the WASH staff. They were developed following our annual planning meeting and are based on a number of key priority issues for the project.

4. **Annex:** Continuing Tasks. These are continuing tasks which were funded in FY89, FY90 and FY91 which will require work during FY92.

Each section contains task sheets detailing the preliminary objectives, schedule, type of personnel required, and budget.

Section I

OPERATION CENTER TASKS

Seven categories have been established to capture costs related to the administratio technical management, task development, information services, promotion, and liais activities required under the project. These tasks are expected to be continued throughou the life of the project. A description of each task and the anticipated FY92 budget for it a presented below.

A. General Administration: This general administration task will provide overall coordination; professional, secretarial, and clerical support; administrative database management; office space and equipment; telecommunications and telephone equipment; document production facilities; mainframe computer usage; and consumable office supplies to support the WASH Project. The estimated budget for FY92 is $808,500.

B. General Technical Assistance: The ongoing technical assistance category includes all WASH Operations Center staff tasks involving the delivery of technical services or products to A.I.D. which are not specifically authorized under other tasks. These include general technical and staff meetings, visitor briefings, routine project correspondence, document review, and other tasks of a technical nature necessary to support WASH activities. The estimated budget for FY92 is $189,000.

C. Annual Plan and Proactive Task Development: This task will provide for time and expenses incurred by task managers and appropriate contractor, subcontractor, and consultant staff in development of scopes of work for proactive tasks generated by WASH staff prior to the issuance of an authorization. This includes the preparation of Task Sheets and draft Task Implementation Plans, the development of Scopes of Work for all requests received from the A.I.D. Cognizant Technical Officer and the development of the Annual Work Plan. The estimated budget for FY92 is $170,000.

D. Information Services: This ongoing task provides for the management and operations of the WASH library and distribution center; acquiring and maintaining holdings; accessions and mailing lists; mailing reports; preparing special reports, searches, and synthesis documents; liaison with U.S. and foreign water supply and sanitation information agencies; preparing exhibits and briefing packages; and maintaining WS&S country information databases. The estimated budget for FY92 is $147,000.

E. **Liaison and Coordination:** There are a total of eight liaison and coordination tasks proposed for 1992. These are continuations of similar tasks initiated in FY91 but reflect the reorganization of the A.I.D. regional bureaus. They include general liaison and coordination with A.I.D. and with other agencies and organizations. The estimated budget for FY92 is $162,000.

F. **Task Development for Mission and Bureau Requests:** This task will provide for time and expenses incurred by task managers and appropriate contractor, subcontractor, and consultant staff in development of scopes of work for tasks generated from Mission and Bureau requests and buy-ins. This includes the preparation of Task Sheets and draft Task Implementation Plans, and the development of Scopes of Work for all requests received from the A.I.D. Cognizant Technical Officer. The estimated budget for FY92 is $125,000.

G. **Preparation and Dissemination of Information:** The purpose of this task is to keep A.I.D. and other development organizations active in water supply and sanitation aware of WASH activities and capabilities, and to disseminate as widely as possible, the experience and findings of WASH research and evaluation. The estimated budget for FY92 is $40,000.

SUMMARY OF OPERATION CENTER TASKS

The Operations Center task titles and estimated costs are summarized as follows:

TASK	SHEET	TITLE	FY92 R&D/H COST	
A)	92001	General Administration		$ 808,500
B)	92002	General Technical Assistance		189,000
C)	92003	Annual Plan and Proactive Task Development		170,000
D)	92004	Information Services		147,000
E)		Liaison and Coordination		
	92005	A.I.D.—Africa Bureau Liaison	11,000	
	92006	A.I.D.—Asia Bureau Liaison	11,000	
	92007	A.I.D.—LAC Bureau Liaison	11,000	
	92008	A.I.D.—Europe Bureau Liaison	8,000	
	92009	A.I.D.—Near East Bureau Liaison	8,000	
	92010	A.I.D.—Non-Regional Bureaus	25,000	
	92011	Collaboration with non-A.I.D. Organizations	55,000	
	92012	WASH Conference Participation	33,000	
		Subtotal Liaison/Coordination		162,000
F)	92013	Task Development for Mission and Bureau Requests		125,000
G)	92014	Preparation and Dissemination of Information on WASH		40,000
TOTAL OPERATIONS CENTER TASKS				**$1,641,500**

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92001
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: General Administration FY 1992

TASK MANAGER: Turner

TASK ORIGIN: WASH III Contract; TAS 201

AUDIENCE: R&D/Health

LOCATION: Washington, DC & subcontractors' offices

OBJECTIVES: To perform those functions (salaries, supplies, leases, etc.) necessary to administratively operate the WASH III Project.

SCHEDULE: Provide administration and support as needed by the WASH III Project throughout FY 1992.

SKILLS: Management

PERSONNEL: WOC staff, subcontractor staff

FOLLOW-UP: FY 93/93001

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	1000 /1000
FY92 COST:	808,500
TOTAL COST:	808,500
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92002
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: General Technical Assistance FY 1992

TASK MANAGER: Turner

TASK ORIGIN: WASH III Contract

AUDIENCE: USAID

LOCATION: Washington, DC & subcontractor's offices

OBJECTIVES: To provide general overall technical management to the operation of the WASH III Project.

SCHEDULE: Perform all necessary general technical functions as needed by USAID and the Project.

SKILLS: Water supply and sanitation technical

PERSONNEL: WOC staff, subcontractor staff

FOLLOW-UP: FY 93/93002

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	350 /350
FY92 COST:	189,000
TOTAL COST:	189,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92003
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Annual Plan and Proactive Task Development

TASK MANAGER: Turner

TASK ORIGIN: WASH III Contract

AUDIENCE: USAID

LOCATION: Washington, DC

OBJECTIVES: Develop preliminary scopes of work at the request of R&D/Health to be used for upcoming proactive tasks and prepare FY 1993 Annual Plan.

SCHEDULE: 1. As needed by R&D/Health. 2. Prepare FY 1992 Annual Plan Updates. 3. Prepare Annual Plan for FY 1993.

SKILLS: Water supply and sanitation technical expertise

PERSONNEL: WOC staff

FOLLOW-UP: FY 93/93003

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	400 /400
FY92 COST:	170,000
TOTAL COST:	170,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92004
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Information Services

TASK MANAGER: Hafner

TASK ORIGIN: WASH III Contract

AUDIENCE: Worldwide

LOCATION: Washington, DC

OBJECTIVES: Provide A.I.D. and A.I.D. assisted/related organizations with relevant information in the WS&S sector, WASH tasks, and other topics as requested by A.I.D.

SCHEDULE: This is a continuous service task.

SKILLS: Librarian and information science

PERSONNEL: Dan Campbell, qualified consultants as required

FOLLOW-UP: FY 93/93004

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	250 /250
FY92 COST:	147,000
TOTAL COST:	147,000
FY92 BUYIN:	

21

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: AFR
COUNTRY:
QUARTER: 1

CODE: 92005
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: A.I.D.: Africa Bureau Liaison

TASK MANAGER: Roark

TASK ORIGIN: WASH III Contract

AUDIENCE: Africa Bureau and associated missions

LOCATION: Washington, DC and related missions

OBJECTIVES: 1. To identify Bureau and Mission needs in WS&S sector. 2. To inform Bureau and Mission officials of WASH resources. 3. To formulate preliminary WASH responses to Bureau and Mission needs. 4. To obtain information for WASH Annual Plan.

SCHEDULE: 1. Continuous contacts with Bureau officials. 2. Visits to selected missions to identify and formulate potential WASH assistance (October 1991 - September 1992).

SKILLS: Technical

PERSONNEL: WOC professional staff

FOLLOW-UP: Subsequent activities for WASH assistance

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	11,000
TOTAL COST:	11,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Asia
COUNTRY:
QUARTER: 1

CODE: 92006
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: A.I.D.: Asia Bureau Liaison

TASK MANAGER: Walker

TASK ORIGIN: WASH III Contract

AUDIENCE: Asia Bureau and associated missions

LOCATION: Washington, DC and related missions

OBJECTIVES: 1. Identify Bureau and Mission needs in the WS&S sector. 2. Inform Bureau and Mission officials of WASH resources. 3. Formulate preliminary WASH responses to Bureau and Mission needs. 4. Obtain information for WASH Annual Plan.

SCHEDULE: 1. Continuous contacts with Bureau officials. 2. Visits to selected missions to identify and formulate potential WASH assistance (October 1991 - September 1992).

SKILLS: Technical

PERSONNEL: WOC professional staff

FOLLOW-UP: Subsequent activities for WASH assistance

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	11,000
TOTAL COST:	11,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY:
QUARTER: 1

CODE: 92007
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: A.I.D.: Latin America/Caribbean Bureau Liaison

TASK MANAGER: Bateman

TASK ORIGIN: WASH III Contract

AUDIENCE: LAC Bureau and associated missions

LOCATION: Washington, DC and related missions

OBJECTIVES: 1. To identify Bureau and Mission needs in WS&S sector. 2. To inform Bureau and Mission officials of WASH resources. 3. To formulate preliminary WASH responses to Bureau and Mission needs. 4. To obtain information for WASH Annual Plan.

SCHEDULE: 1. Continuous contacts with Bureau officials. 2. Visits to selected missions to identify and formulate potential WASH assistance (October 1991 - September 1992).

SKILLS: Technical

PERSONNEL: WOC professional staff

FOLLOW-UP: Subsequent activities for WASH assistance

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	23 /23
FY92 COST:	11,000
TOTAL COST:	11,000
FY92 BUYIN:	

24

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Europe
COUNTRY:
QUARTER: 1

CODE: 92008
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: A.I.D.: Europe Bureau Liaison

TASK MANAGER: Hafner

TASK ORIGIN: WASH III Contract

AUDIENCE: Europe and associated missions

LOCATION: Washington, DC and related missions

OBJECTIVES: 1. To identify Bureau and Mission needs in WS&S sector. 2. To inform Bureau and Mission officials of WASH resources. 3. To formulate preliminary WASH responses to Bureau and Mission needs. 4. To obtain information for WASH Annual Plan.

SCHEDULE: 1. Continuous contacts with Bureau officials. 2. Visits to selected Missions to identify and formulate potential WASH assistance (October 1991 - September 1992).

SKILLS: Technical

PERSONNEL: WOC professional staff

FOLLOW-UP: Subsequent activities for WASH assistance

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	8,000
TOTAL COST:	8,000
FY92 BUYIN:	

25

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY:
QUARTER: 1

CODE: 92009
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: A.I.D.: Near East Bureau Liaison

TASK MANAGER: Rosensweig

TASK ORIGIN: WASH III Contract

AUDIENCE: Near East Bureau and associated missions

LOCATION: Washington, DC and related missions

OBJECTIVES: 1. To identify Bureau and Mission needs in WS&S sector. 2. To inform Bureau and Mission officials of WASH resources. 3. To formulate preliminary WASH responses to Bureau and Mission needs. 4. To obtain information for WASH Annual Plan.

SCHEDULE: 1. Continuous contacts with Bureau officials. 2. Visits to selected Missions to identify and formulate potential WASH assistance (October 1991 - September 1992).

SKILLS: Technical

PERSONNEL: WOC professional staff

FOLLOW-UP: Subsequent activities for WASH assistance

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	8,000
TOTAL COST:	8,000
FY92 BUYIN:	

46

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Non-Regional Bureaus
COUNTRY: USA
QUARTER: 1

CODE: 92010
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: A.I.D.: Liaison with Non-Regional Bureaus

TASK MANAGER: Turner

TASK ORIGIN: WASH III Contract

AUDIENCE: PPC, PVO, PRE, FVA/PVC staff

LOCATION: Washington, DC

OBJECTIVES: 1. Provide technical input to non-regional bureau documents relating to WSS. 2. Assist in the method of developing field reference guides.

SCHEDULE: Periodic contacts with PPC, PVO, PRE, FVA/PVC staff.

SKILLS: Technical

PERSONNEL: WOC professional staff

FOLLOW-UP: FY 93

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	30 /30
FY92 COST:	25,000
TOTAL COST:	25,000
FY92 BUYIN:	

-21

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92011
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Collaboration with Non-A.I.D. Organizations

TASK MANAGER: Hafner

TASK ORIGIN: WASH III Contract

AUDIENCE: International development community

LOCATION: Worldwide

OBJECTIVES: Establish & maintain working relationships, collaborative efforts & info exchange w/non A.I.D. organizations working on WS&S sector: PVO's multi- & bi-lateral organizations, international organizations, LDC agencies, private sector organizations, etc.

SCHEDULE: 1. Develop list of key organizations and individuals to contact.
2. Meet with organizations and develop potential scope of work for WASH collaboration.

SKILLS: Knowledge of WASH, WS&S sector, international relations and development

PERSONNEL: WASH professional staff and qualified consultants

FOLLOW-UP: Mutual benefit in planning, implementing, and evaluating WS&S projects

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	65 /65
FY92 COST:	55,000
TOTAL COST:	55,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92012
TASK:

DATES: BEGIN 10/01/91
FIELD TBD
END 09/30/92

TASK TITLE: WASH Staff Conference Participation

TASK MANAGER: Turner

TASK ORIGIN: WASH III Contract

AUDIENCE: International development community

LOCATION: U.S. and overseas

OBJECTIVES: 1. To participate as a presenter and/or participant in professional conferences. 2. To make contacts within the development community in promoting water/sanitation.

SCHEDULE: During each quarter, a number of conferences and meetings will be attended by WASH staff in the U.S. and overseas.

SKILLS: Engineers, social scientists, public health specialists, trainers, information specialists

PERSONNEL: WASH technical staff

FOLLOW-UP: None

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	35 /35
FY92 COST:	33,000
TOTAL COST:	33,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92013
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Task Development for Mission and Bureau Requests

TASK MANAGER: Turner

TASK ORIGIN: WASH III Contract; discussions with R&D/Health

AUDIENCE: USAID

LOCATION: Washington, DC

OBJECTIVES: Develop preliminary scopes of work and other documentation at the request of R&D/Health to be used for mission and bureau requests.

SCHEDULE: As needed by R&D/Health.

SKILLS: WS&S

PERSONNEL: WOC staff

FOLLOW-UP: FY 93

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	200 /200
FY92 COST:	125,000
TOTAL COST:	125,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY:
QUARTER: 1

CODE: 92014
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Preparation and Dissemination of Information on WASH

TASK MANAGER: Bendahmane

TASK ORIGIN: R&D/Health

AUDIENCE: A.I.D. bureaus and missions and development organizations involved in water and sanitation

LOCATION: Washington, DC

OBJECTIVES: To keep A.I.D. and other development organizations active in water supply and sanitation aware of WASH activities and capabilities and to disseminate as widely as possible, the findings of WASH research and evaluation.

SCHEDULE: Ongoing throughout the year.

SKILLS: Knowledge of WASH, experience in publications, skill in writing

PERSONNEL: Diane Bendahmane

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	60 /60
FY92 COST:	40,000
TOTAL COST:	40,000
FY92 BUYIN:	

Section II

MISSION AND BUREAU REQUESTS

Mission and bureau requests are tasks based on direct requests from A.I.D. missions and bureaus. These tasks are the result of a cable and other communications from R&D/Health to A.I.D. missions and bureaus requesting their input to this Annual Work Plan. The tasks contained in this section of the plan have been reviewed and approved on a preliminary basis by R&D/Health.

This section of the work plan contains a total of 31 tasks from mission and bureau requests with an estimated budget of $2,131,500 which will be funded with R&D/H core funds and existing mission and bureau buy-ins. The tasks in this section are divided into four categories: 1) follow-on tasks to be funded with R&D/Health core funds; 2) follow-on tasks to be funded with buy-ins received in FY91 or earlier; 3) proposed tasks which will be considered for core funding, but may be funded with mission buy-ins, and 4) potential buy-ins from missions. Below is a summary breakdown of funding for these tasks.

Follow-on tasks with R&D/H core funds	$ 58,000	
Follow-on proposed tasks with core funding	215,000	
Total follow-on tasks with core funding		273,000
Follow-on tasks funded with existing buy-ins	1,858,500	
Potential buy-ins	(unknown)	
Total buy-ins		$ 1,858,500
Total mission and bureau requests		$ 2,131,500

A total of $193,400 has been reserved for additional unidentified future requests for WASH assistance from A.I.D. missions and bureaus during FY92. This estimate is based on a review of requests received in previous years.

R&D/H core funds available	$ 466,400
Follow-on tasks with core funding	273,000
Amount remaining for future requests	193,400

FOLLOW-ON TASKS—R&D\H CORE FUNDS

CODE	TITLE	FY92 COST
92015	Collaborative Council Meeting	$ 40,000
92016	Participation in NCIH and AWWA Annual Conferences	12,000
92017	Technical Assistance to PAHO in Workshop Design/Facilitation	6,000
	Subtotal Follow-on Tasks—R&D Core Funds	**$ 58,000**

FOLLOW-ON TASKS—EXISTING BUY-INS

CODE	TITLE	FY92 COST
92018	Ongoing Technical Assistance to Danube Basin Study	$ 735,000
92019	TUNISIA: Preparation of WUA Procedures Manual	28,500
92020	TUNISIA: Evaluation of Training	43,000
92021	TUNISIA: Refresher Course for Trainers	55,000
92022	ECUADOR: WASHED Monitoring Workshop for Year 2	75,000
92023	ECUADOR: WASHED Hygiene Education Program Development—Phase III	30,000
92024	ECUADOR: WASHED O&M Systems Development—Phase III	10,000
92025	ECUADOR: WASHED Appropriate Technology—Phase III	14,000
92026	ECUADOR: Project Preparation Workshop	40,000
92027	ECUADOR: Institutional Strengthening of ANEMAPA	20,000
92028	ECUADOR: Twinning Technical Assistance to EMAP-Q	18,000
92029	ECUADOR: Technical Assistance to Selected Utilities in Financial Management	80,000
92030	ECUADOR: Institutional Development Workshop for WS&S Agencies	30,000
92031	BELIZE: Institutionalizing Community Management in WS&S	130,000
92032	JAMAICA: Management Analysis of NWC	50,000
92033	ZAIRE: Training SNHR Staff in Administration and Management	100,000
92034	SRI LANKA: Technical Assistance to NWSDB	400,000
	Subtotal Follow-on Tasks—Buy-ins	**$ 1,858,500**
	TOTAL FOLLOW-ON TASKS	**$ 1,916,500**

PROPOSED TASKS

CODE	TITLE	FY92 COST
92035	PAPUA NEW GUINEA: Community Hygiene Training Manual	$35,000
92036	PHILIPPINES: Urban Environmental Management	30,000
92037	NIGER: Latrine Construction Training Program	40,000
92038	MOROCCO: CRS Water and Sanitation Project	50,000
92039	GUATEMALA: Technical Assistance to CARE in Project Monitoring and Evaluation	25,000
92040	BANGLADESH: Collaboration with ICDDR,B, Phase II	35,000
	Subtotal Proposed Tasks	**$ 215,000**

POTENTIAL BUY-INS

CODE	TITLE	FY92 COST
92041	INDONESIA: Privatizing Urban Services Project	*
92042	EGYPT: Institutional Development	*
92043	TUNISIA: National Seminar for Presentation of WUA Strategy	*
92044	TUNISIA: Preparation of Draft Text on National WUA Strategy	*
92045	PERU: Water and Sanitation Project Design	*
	TOTAL MISSION/BUREAU REQUESTS	**$ 2,131,500**

* not yet determined

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: TBD
QUARTER: 2

CODE: 92015
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 09/30/92

TASK TITLE: Collaborative Council Activities

TASK MANAGER: Hafner

TASK ORIGIN: 1991 Collaborative Council Meeting in Oslo, Norway

AUDIENCE: R&D/H, multilateral/bilateral organizations

LOCATION: TBD

OBJECTIVES: In the past several years, WASH has been represented at meetings held by the Collaborative Council for External Support Agencies in the W&S Sector. WASH anticipates continuing its participation in follow-on Collaborative Council activities in FY 92.

SCHEDULE: Participate in FY 92 Collaborative Council activities.

SKILLS: WS&S specialists

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	40,000
TOTAL COST:	40,000
FY92 BUYIN:	

- 35

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 3

CODE: 92016
TASK:

DATES: BEGIN 05/01/92
FIELD NONE
END 08/30/92

TASK TITLE: Participation in NCIH and AWWA Annual Conferences

TASK MANAGER: TBD

TASK ORIGIN: Discussions with R&D/H; NCIH; AWWA

AUDIENCE: International organizations

LOCATION: Washington, DC

OBJECTIVES: Attend the annual NCIH and AWWA conference and present papers on appropriate topics.

SCHEDULE: June: NCIH Conference. June: AWWA Conference.

SKILLS: TBD

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	15 /15
FY92 COST:	12,000
TOTAL COST:	12,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 2

CODE: 92017
TASK:

DATES: BEGIN 02/01/92
FIELD NONE
END 08/30/92

TASK TITLE: Technical Assistance to PAHO in Workshop Design/Facilitation

TASK MANAGER: TBD

TASK ORIGIN: Discussions between R&D/H and PAHO

AUDIENCE: PAHO

LOCATION: Washington, DC

OBJECTIVES: For 5 years now, WASH has been asked by PAHO to assist in the design & facilitation of various seminars. WASH anticipates a similar request for FY92 from PAHO to provide technical assistance in designing/conducting a workshop.

SCHEDULE: February or March 1992.

SKILLS: Training, facilitation

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	10 /10
FY92 COST:	6,000
TOTAL COST:	6,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Europe
COUNTRY: TBD
QUARTER: 1

CODE: 92018
TASK:

DATES: BEGIN 10/01/91
FIELD TBD
END 09/30/92

TASK TITLE: Ongoing Technical Assistance to Danube Basin Study

TASK MANAGER: Hafner

TASK ORIGIN: TAS 263, 271

AUDIENCE: R&D/H; Europe Bureau

LOCATION: Washington, DC; Eastern/Central Europe

OBJECTIVES: To provide ongoing technical assistance to the Danube River Basin Study as required by the Europe Bureau.

SCHEDULE: Ongoing through FY 1992

SKILLS: TBD

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	1000 /1000
FY92 COST:	735,000
TOTAL COST:	735,000
FY92 BUYIN:	735,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: TUNISIA
QUARTER: 4

CODE: 92019
TASK:

DATES: BEGIN 02/01/92
FIELD 03/01 to 03/30/92
END 06/30/92

TASK TITLE: TUNISIA: Preparation of WUA Procedures Manual

TASK MANAGER: Rosensweig

TASK ORIGIN: Cable: Tunis 04114

AUDIENCE: R&D/H, USAID, local community organizations

LOCATION: Kasserine, Tunis

OBJECTIVES: Prepare a reference manual to set forth guidelines and procedures for forming WUAs. The manual will be written as a standard document for use in implementing the strategy.

SCHEDULE: Four weeks in March 1992.

SKILLS: One training specialist fluent in French

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	34 /34
FY92 COST:	28,500
TOTAL COST:	28,500
FY92 BUYIN:	28,500

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: TUNISIA
QUARTER: 2

CODE: 92020
TASK:

DATES: BEGIN 01/01/92
FIELD 01/15 to 02/15/92
END 06/30/92

TASK TITLE: TUNISIA: Evaluation of Training

TASK MANAGER: Rosensweig

TASK ORIGIN: Cable: Tunis 04114

AUDIENCE: R&D/H, USAID, local community organizations

LOCATION: Kasserine, Tunis

OBJECTIVES: Determine effectiveness of the training for both training trainers and for the creation and operation of WUAs.

SCHEDULE: Four weeks in January - February 1992.

SKILLS: One French speaking trainer/evaluation specialist, one social scientist/community development specialist (local)

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	64 /64
FY92 COST:	43,000
TOTAL COST:	43,000
FY92 BUYIN:	43,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: TUNISIA
QUARTER: 3

CODE: 92021
TASK:

DATES: BEGIN 12/15/91
FIELD 01/92 to 02/92
END 06/30/92

TASK TITLE: TUNISIA: Refresher Course for Trainers

TASK MANAGER: Rosensweig

TASK ORIGIN: Cable: Tunis 04114

AUDIENCE: USAID, R&D/H, local community organizations

LOCATION: Kasserine, Tunis

OBJECTIVES: 1. To identify any problems with the workshops conducted since the TOT. 2. Identify solutions and introduce new training skills if needed. 3. Discuss technical issues.

SCHEDULE: Four weeks in January - February 1992.

SKILLS: Two experienced French speaking trainers, one local trainer

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	90 /90
FY92 COST:	55,000
TOTAL COST:	55,000
FY92 BUYIN:	55,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 2

CODE: 92022
TASK:

DATES: BEGIN 06/01/92
FIELD 6/15/92 to 07/15/92
END 09/30/92

TASK TITLE: ECUADOR: WASHED Monitoring Workshop for Year 2

TASK MANAGER: Sarai

TASK ORIGIN: PIO/T 518-0081-3-90085

AUDIENCE: USAID/Quito, IEOS, R&D/Health

LOCATION: Quito, Ecuador

OBJECTIVES: Conduct a three-day project review workshop of the second year based on a previously developed project monitoring instrument. Conduct follow-on technical assistance to WASHED in hygiene education, O&M, and appropriate technology.

SCHEDULE: 1. Conduct interviews w/IEOS provincial staff and central office staff, project consultants & A.I.D. staff. 2. Design/conduct workshop. 3. Conduct TA in WASHED project components.

SKILLS: Spanish speaking international management consultant, national trainer, hygiene ed. specialist, O&M specialist, env engr

PERSONNEL: D. Edwards, M. Torres, J. Aubel, O. Larrea, O. Cordon

FOLLOW-UP: Annual review workshop for years three and four of the project

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	125 /125
FY92 COST:	75,000
TOTAL COST:	75,000
FY92 BUYIN:	75,000

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WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 2

CODE: 92023
TASK:

DATES: BEGIN 01/01/92
FIELD 1/15/92 to 02/15/92
END 06/30/92

TASK TITLE: ECUADOR: WASHED Hygiene Education Program Development -- Phase III

TASK MANAGER: Sarai

TASK ORIGIN: PIO/T 518-0081-3-90085

AUDIENCE: USAID/Quito, IEOS Hygiene Education Dept, R&D/Health

LOCATION: Quito, Ecuador

OBJECTIVES: To cont. the work begun in Phases I & II hyg. educ. devel. program. To provide specific input in strategies & techniques for developing, improving & evaluating the mass communications strategy for hygiene education & the promotional strategy in general.

SCHEDULE: 1. Review progress to date. 2. Develop improved strategies for conducting mass commu. strategy. 3. Review IEOS's exper. w/community involvement & make recommendations for improving community promo. practices. 4. Develop revis. action plan for next yr.

SKILLS: Hygiene education specialist, anthropologist, consultants fluent in Spanish

PERSONNEL: Judi Aubel, TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	70 /70
FY92 COST:	30,000
TOTAL COST:	30,000
FY92 BUYIN:	30,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 2

CODE: 92024
TASK:

DATES: BEGIN 01/01/92
FIELD 1/15/92 to 02/15/92
END 06/30/92

TASK TITLE: ECUADOR: WASHED O&M Systems Development - Phase III

TASK MANAGER: Sarai

TASK ORIGIN: PIO/T 518-0081-3-90085

AUDIENCE: USAID/Quito, IEOS engineering staff, R&D/Health

LOCATION: Quito, Ecuador

OBJECTIVES: To continue work begun in Phases I & II which includes setting-up an O&M system for IEOS & assisting with the design & monitoring of these systems.

SCHEDULE: 1. Review progress to date. 2. Review and update training curriculum. 3. Review field performance of O&M facilities at provincial offices & review these installations for technical soundness.

SKILLS: Engineer experienced in O&M systems design and training program design, fluent in Spanish

PERSONNEL: Oscar Larrea

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	30 /30
FY92 COST:	10,000
TOTAL COST:	10,000
FY92 BUYIN:	10,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 2

CODE: 92025
TASK:

DATES: BEGIN 01/01/92
FIELD 1/15/92 to 02/15/92
END 06/30/92

TASK TITLE: ECUADOR: WASHED Appropriate Technology - Phase III

TASK MANAGER: Sarai

TASK ORIGIN: PIO/T 518-0081-3-90085

AUDIENCE: USAID/Quito, IEOS engineering staff, R&D/H

LOCATION: Quito, Ecuador

OBJECTIVES: To continue work begun in Phases I & II which includes technical assistance to IEOS staff in conducting & managing applied research activities.

SCHEDULE: 1. Review annual progress. 2. Provide additional training in research methodology. 3. Assist IEOS in strategies of application & use of research results in IEOS.

SKILLS: Senior environmental engineer with RWSS design experience, fluent in Spanish

PERSONNEL: Octavio Cordon

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	30 /30
FY92 COST:	14,000
TOTAL COST:	14,000
FY92 BUYIN:	14,000

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WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 1

CODE: 92026
TASK:

DATES: BEGIN 11/01/91
FIELD 11/15/91 to 12/1/91
END 06/30/92

TASK TITLE: ECUADOR: Project Preparation Workshop

TASK MANAGER: Sarai

TASK ORIGIN: RHUDO/Ecuador PIO/T 518-0076-3-90057; TAS 146; TAS 220

AUDIENCE: USAID, RHUDO, EMAP-Q, EMA-Q

LOCATION: Ecuador

OBJECTIVES: To design and conduct an 8-day workshop to train those responsible for planning in utilities on techniques for preparing technical and financially feasible project proposals.

SCHEDULE: 1. November 1991: Design workshop. 2. January 1992: Conduct workshop.

SKILLS: Trainer/facilitator, specialist in project preparation, financial analyst/cost recovery specialist

PERSONNEL: M. Torres, L. Pereira, J. Infante

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	40 /40
FY92 COST:	40,000
TOTAL COST:	40,000
FY92 BUYIN:	40,000

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WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 2

CODE: 92027
TASK:

DATES: BEGIN 01/01/92
FIELD 02/15/92 to 3/15/92
END 05/30/92

TASK TITLE: ECUADOR: Institutional Strengthening of ANEMAPA

TASK MANAGER: Sarai

TASK ORIGIN: RHUDO/Ecuador PIO/T 518-0076-3-90057

AUDIENCE: R&D/H, USAID/Quito, RHUDO/SA, ANEMAPA

LOCATION: Quito, Ecuador

OBJECTIVES: To strengthen ANEMAPA (association of water companies in Ecuador) in its ability to be an effective associat'n--activities such as developing a mission statement and plan of activities, raising funds, establishing relationship w/member utilities, etc.

SCHEDULE: Three 2-week visits over a 1-year period.

SKILLS: Institutional development specialist

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	20,000
TOTAL COST:	20,000
FY92 BUYIN:	20,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 3

CODE: 92028
TASK:

DATES: BEGIN 05/01/92
FIELD TBD
END 09/30/92

TASK TITLE: ECUADOR: Twinning Technical Assistance to EMAP-Q

TASK MANAGER: Sarai

TASK ORIGIN: RHUDO/Ecuador

AUDIENCE: RHUDO, USAID, EMAP-Q, other water utilities

LOCATION: Ecuador

OBJECTIVES: WASH will assist Quito water authority (EMAP-Q) to develop a plan to act as a "twin" to 2 other utilities. The tech. assistance will consist of planning, transferring info, determining institut'l implications of twinning, selecting appropriate staff,etc

SCHEDULE: One 3-week visit.

SKILLS: WS&S specialist with twinning experience, fluent Spanish

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	18,000
TOTAL COST:	18,000
FY92 BUYIN:	18,000

VB

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 3

CODE: 92029
TASK:

DATES: BEGIN 03/01/92
FIELD TBD
END 09/30/92

TASK TITLE: ECUADOR: Technical Assistance to Selected Utilities in Financial Management

TASK MANAGER: Sarai

TASK ORIGIN: RHUDO/Ecuador PIO/T 518-0076-3-90057; TAS 129; TAS 231

AUDIENCE: R&D/H, USAID/Quito, RHUDO/Ecuador, water utilities

LOCATION: Ecuador

OBJECTIVES: WASH will provide direct technical assistance to two select water utilities in the area of financial management, using approaches and materials developed in prior activities.

SCHEDULE: Each utility will receive three weeks of technical assistance in two separate visits.

SKILLS: Specialist in financial management, fluent in Spanish

PERSONNEL: J. Infante

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	75 /75
FY92 COST:	80,000
TOTAL COST:	80,000
FY92 BUYIN:	80,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: ECUADOR
QUARTER: 4

CODE: 92030
TASK:

DATES: BEGIN 07/01/92
FIELD TBD
END 12/31/92

TASK TITLE: ECUADOR: Institutional Development Workshop for WS&S Agencies

TASK MANAGER: Sarai

TASK ORIGIN: RHUDO/Ecuador PIO/T 518-0076-3-90057

AUDIENCE: USAID/Quito, RHUDO, IEOS, EMA, EMAP

LOCATION: Quito, Ecuador

OBJECTIVES: Provide info. to company managers on current techniques for improving the administration and operation of WS&S municipal agencies in order to reduce operational costs and increase the productivity of these agencies.

SCHEDULE: Design and conduct workshop that will include such topics as organizational & administrative systems, human resources, training, public relations, business management, operations and production control, etc.

SKILLS: Two facilitators, one of whom will have expertise in organizational management

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	40 /40
FY92 COST:	30,000
TOTAL COST:	30,000
FY92 BUYIN:	30,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: BELIZE
QUARTER: 1

CODE: 92031
TASK:

DATES: BEGIN 11/01/91
FIELD TBD
END 03/31/92

TASK TITLE: BELIZE: Institutionalizing Community Management in WS&S

TASK MANAGER: Yacoob

TASK ORIGIN: Buy-in

AUDIENCE: Belizian managers in water authority and Ministry of Health

LOCATION: Belize

OBJECTIVES: 1. Develop capability of communities to manage water and sanitation. 2. Develop capability among relevant ministries to coordinate action and provide necessary support for community-based WS&S activities.

SCHEDULE: 1. November 1991: Assessment of institutions, communities and O&M management. 2. January 1992: Study tour Belizian officials. 3. February - March 1992: Policy dialogue meeting.

SKILLS: Institution development, O&M specialist, social scientist, trainer/facilitator

PERSONNEL: J. Van Sant, A. Wyatt, B. Hollister, M. Yacoob

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	200 /200
FY92 COST:	130,000
TOTAL COST:	130,000
FY92 BUYIN:	130,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: JAMAICA
QUARTER: 1

CODE: 92032
TASK:

DATES: BEGIN 10/15/91
FIELD 11/01/91
END 01/31/92

TASK TITLE: JAMAICA: Management Analysis of NWC

TASK MANAGER: Rosensweig

TASK ORIGIN: PIO/T 532-0149-3-90360

AUDIENCE: USAID/Jamaica, RHUDO/Kingston

LOCATION: Kingston

OBJECTIVES: Conduct a management analysis of NWC to identify ways to improve its operation and planning.

SCHEDULE: TPM (late October). Fieldwork (November). Report (December).

SKILLS: Environmental engr, institutional specialist, financial analyst

PERSONNEL: D. Cullivan, J. Austin

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	60 /60
FY92 COST:	50,000
TOTAL COST:	50,000
FY92 BUYIN:	50,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: AFR
COUNTRY: ZAIRE
QUARTER: 2

CODE: 92033
TASK:

DATES: BEGIN 11/15/91
FIELD 01/07/92 - 09/01/92
END 09/30/92

TASK TITLE: ZAIRE: Training SNHR Staff in Administration and Management

TASK MANAGER: Rosensweig

TASK ORIGIN: PIO/T 660-0107-3-90189

AUDIENCE: SNHR Staff

LOCATION: Zaire

OBJECTIVES: Design training courses in administration and management of SNHR field and headquarters staff.

SCHEDULE: Design training and develop materials (Jan 92). Contract with local groups to deliver training (Jan 92). Implement training (April 92). Revise materials (July 92).

SKILLS: Training, administration, and management

PERSONNEL: Dick Wall, local consultant

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	160 /160
FY92 COST:	100,000
TOTAL COST:	100,000
FY92 BUYIN:	100,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: ASIA
COUNTRY: SRI LANKA
QUARTER: 1

CODE: 92034
TASK:

DATES: BEGIN 10/01/91
FIELD TBD
END 09/30/93

TASK TITLE: SRI LANKA: Technical Assistance to NWSDB

TASK MANAGER: Rosensweig

TASK ORIGIN: Colombo 02689

AUDIENCE: NWSDB

LOCATION: Colombo, Sri Lanka

OBJECTIVES: Provide short-term technical assistance to NWSDB in management development, strategic planning, training program development, and consumer orientation.

SCHEDULE: TBD

SKILLS: Strategic planning, management development, consumer program development, technical training.

PERSONNEL: L. Pereira, D. Edwards, E. Salt

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	500 /500
FY92 COST:	400,000
TOTAL COST:	400,000
FY92 BUYIN:	400,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Asia
COUNTRY: Papua New Guinea
QUARTER: 3

CODE: 92035
TASK:

DATES: BEGIN 04/01/92
FIELD TBD
END 12/31/92

TASK TITLE: PAPUA NEW GUINEA: Community Hygiene Training Manual

TASK MANAGER: Yacoob

TASK ORIGIN: Mission request

AUDIENCE: Community leaders

LOCATION: Papua New Guinea

OBJECTIVES: Develop process and content for appropriate approaches for community hygiene behavior change.

SCHEDULE: April 1992: fieldwork. May/June 1992: complete report.

SKILLS: Social scientist/trainer

PERSONNEL: TBD

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	20 /20
FY92 COST:	35,000
TOTAL COST:	35,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: ASIA
COUNTRY: PHILIPPINES
QUARTER: 2

CODE: 92036
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 01/01/93

TASK TITLE: PHILIPPINES: Urban Environment Management

TASK MANAGER: Walker

TASK ORIGIN: Cable Manila 12268

AUDIENCE: USAID/Manila, Government of Philippines policy makers

LOCATION: Philippines

OBJECTIVES: To assist USAID in the area of urban environmental management.

SCHEDULE: TBD

SKILLS: Environmental engineer

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	24 /24
FY92 COST:	30,000
TOTAL COST:	30,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: AFR
COUNTRY: NIGER
QUARTER: 2

CODE: 92037
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 09/30/92

TASK TITLE: NIGER: Latrine Construction Training Program

TASK MANAGER: TBD

TASK ORIGIN: Telephone request from Peace Corps/Niger

AUDIENCE: Peace Corps Volunteers

LOCATION: Niger

OBJECTIVES: To train Peace Corps volunteers on the technical skills related to latrine construction as well as the communication skills needed to transfer the knowledge.

SCHEDULE: TBD

SKILLS: Technical trainer

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	30 /30
FY92 COST:	40,000
TOTAL COST:	40,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: MOROCCO
QUARTER: 2

CODE: 92038
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 09/30/92

TASK TITLE: MOROCCO: CRS Water and San'tation Project

TASK MANAGER: TBD

TASK ORIGIN: Mission request

AUDIENCE: CRS personnel

LOCATION: Morocco

OBJECTIVES: To provide technical assistance to CRS/Morocco in project start-up and on-going monitoring evaluation and technical assistance if necessary.

SCHEDULE: TBD

SKILLS: TBD

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	40 /40
FY92 COST:	50,000
TOTAL COST:	50,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: GUATEMALA
QUARTER: 1

CODE: 92039
TASK:

DATES: BEGIN 10/01/91
FIELD 11/4/91 - 11/23/91
END 12/31/91

TASK TITLE: GUATEMALA: Technical Assistance to CARE in Project Monitoring and Evaluation

TASK MANAGER: Bateman

TASK ORIGIN: Mission request

AUDIENCE: S&T/H, USAID, CARE, WS&S community

LOCATION: Guatemala

OBJECTIVES: 1. Provide technical assistance for a baseline survey. 2. Establish a system of indicators for project monitoring. 3. Identify future technical assistance needs.

SCHEDULE: October: planning; November: fieldwork; December: finalize report, recommendations

SKILLS: behavioral assessment/surveys, epidemiology, management information systems

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	43 /43
FY92 COST:	25,000
TOTAL COST:	25,000
FY92 BUYIN:	

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WASH III PROJECT FY 1992

TASK SHEET

BUREAU: ENE
COUNTRY: BANGLADESH
QUARTER: 1

CODE: 92040
TASK:

DATES: BEGIN 10/01/91
FIELD 11/17/91 - 11/30/91
END 12/31/91

TASK TITLE: BANGLADESH: Collaboration with ICDDR,B, Phase II

TASK MANAGER: Bateman

TASK ORIGIN: Follow-on

AUDIENCE: S&T/H, USAID, ICDDR,B, International Health & Development Community

LOCATION: Dhaka

OBJECTIVES: 1. Assist in the design, preparation, and conduct of a regional workshop on applied research priorities in water supply and sanitation in Dhaka. 2. Substantive participation in the workshop.

SCHEDULE: October: workshop planning; November:

SKILLS: Public health/epidemiology, workshop facilitation

PERSONNEL: TBD, Bateman

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	55 /55
FY92 COST:	35,000
TOTAL COST:	35,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: ASIA
COUNTRY: INDONESIA
QUARTER: 2

CODE: 92041
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 01/01/93

TASK TITLE: INDONESIA: Privatizing Urban Services Project

TASK MANAGER: Walker

TASK ORIGIN: Task 186; Cable Jakarta 05074

AUDIENCE: USAID/Jakarta, host country policy makers

LOCATION: Indonesia

OBJECTIVES: To further assist USAID/Jakarta in the privatization of urban water supply.

SCHEDULE: TBD

SKILLS: Water resource specialist, economist

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL: 0 /0
FY92 COST:
TOTAL COST:
FY92 BUYIN:

101

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: EGYPT
QUARTER: 2

CODE: 92042
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 09/30/93

TASK TITLE: EGYPT: Institutional Development

TASK MANAGER: Rosensweig

TASK ORIGIN: Cairo 10395

AUDIENCE: USAID/Cairo

LOCATION: Cairo

OBJECTIVES: 1. Assist USAID/Cairo in project planning and monitoring for Cairo Water Supply II and Cairo Sewerage II. 2. Assist Cairo Water (GOCWSS) and Cairo Sewerage (GOSD) in improving internal management.

SCHEDULE: 1. Conduct start-up workshop for both projects. 2. Conduct annual project reviews for both projects. 3. Conduct management skills workshops for both projects.

SKILLS: Institutional development, management developmet

PERSONNEL: D. Edwards, T. Selim, D. Hahn-Rollins, S. Joyce

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL: 0 /0
FY92 COST:
TOTAL COST:
FY92 BUYIN:

12

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: TUNISIA
QUARTER: 2

CODE: 92043
TASK:

DATES: BEGIN 04/01/92
FIELD 05/92 to 06/92
END 06/30/92

TASK TITLE: TUNISIA: National Seminar for Presentation of WUA Strategy

TASK MANAGER: Rosensweig

TASK ORIGIN: TASK 136

AUDIENCE: USAID, R&D/Health, local community organizations

LOCATION: Tunis

OBJECTIVES: Present draft strategy document to high-level decisionmakers for comments and concurrence. Purpose of this activity is to help Tunisians design and facilitate the seminar.

SCHEDULE: 3 - 4 weeks in May - June 1992.

SKILLS: Experience with other Action Plan activities, experience in facilitating national-level seminars, fluency in French

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL: 0 /0
FY92 COST:
TOTAL COST:
FY92 BUYIN:

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: Near East
COUNTRY: TUNISIA
QUARTER: 2

CODE: 92044
TASK:

DATES: BEGIN 03/01/92
FIELD 04/92
END 06/30/92

TASK TITLE: TUNISIA: Preparation of Draft Text on National WUA Strategy

TASK MANAGER: Rosensweig

TASK ORIGIN: TAS 136

AUDIENCE: USAID, R&D/Health, local community organizations

LOCATION: Tunis

OBJECTIVES: Assist the WUA Coordinating Committee at GR/Tunis to pull together all information on forming and operating WUAs in Tunisia and prepare a draft text of the national strategy.

SCHEDULE: 3 - 4 weeks in April 1992.

SKILLS: Knowledge & experience w/Action Plan Activities in Tunisia, writing & presentat'n skills, excellent French or Arabic

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL: 0 /0
FY92 COST:
TOTAL COST:
FY92 BUYIN:

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WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY: PERU
QUARTER: 2

CODE: 92045
TASK:

DATES: BEGIN 01/01/92
FIELD TBD
END 09/30/92

TASK TITLE: PERU: Water and Sanitation Project Design

TASK MANAGER: Perez

TASK ORIGIN: Lima 06456

AUDIENCE: USAID

LOCATION: Lima

OBJECTIVES: To assist the mission in designing a new WS&S local currency funded project.

SCHEDULE: TBD

SKILLS: TBD

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL: 0 /0
FY92 COST:
TOTAL COST:
FY92 BUYIN:

65

Section III

PROACTIVE TASKS

Proactive tasks are the new initiatives proposed by WASH, which are intended to facilitate the achievement of A.I.D.'s objectives. In the past, WASH proactive tasks were designed to examine issues in each of the individual subsectors such as community participation, hygiene education, health, institutional and human resource development, financial management, engineering, operations and maintenance, and information. In recent years, however, it has become increasingly evident that the major issues affecting the sector today are really cross-cutting issues. Furthermore, the needs of the sector in general, and A.I.D. in particular, are changing such that greater emphasis is placed on areas such as decentralization, privatization, urban and peri-urban issues, cholera, etc. The WASH proactive tasks for FY92 were therefore designed to examine cross-cutting issues and to respond to the changing needs of the sector and of A.I.D.

A total of $392,100 of FY92 funds are allocated for proactive tasks. The 14 new initiatives proposed by WASH for FY92 have an estimated budget of $412,100. If additional funds do not become available, one or more of the proactive tasks will have to be modified or dropped. These initiatives were developed by CDM and its subcontractors in close consultation and collaboration with A.I.D. All follow-on and proposed proactive tasks will be funded by FY92 R&D/Health core funds.

FOLLOW-ON TASKS

CODE	TITLE	FY92 COST
92046	Peri-Urban Information Network	$ 15,000
92047	Rainwater Harvesting Information Network	12,000
92048	WASH/VBC Guinea Worm Disease Information Center	4,000
92049	Decentralizing Water and Sanitation Services (Year 2)	10,000
92050	Sustainability in Water Supply and Sanitation—Phase II	46,100
92051	Technical Note on Cholera Prevention Options	10,000
92052	Application of Storyboard Presentation	10,000
	Subtotal Follow-on Tasks	**$ 107,100**

PROPOSED TASKS

CODE	TITLE	FY92 COST
92053	Highlighting Sanitation Needs in Peri-Urban Areas	$ 35,000
92054	Understanding the Constraints of Urban Formal Sectors	35,000
92055	Cholera Prevention: Assessing the Options	30,000
92056	Assessing the Effectiveness of Wastewater and Solid Waste Management	90,000
92057	Maximizing Health Impact: Programmatic Tools for Project Monitoring and Improvement	40,000
92058	Analytical Framework to Address Financial Viability in WS&S Projects	50,000
92059	Making Interdisciplinary Teams Work	25,000
	Subtotal Proposed Tasks	**$ 305,000**
	TOTAL PROACTIVE TASKS	**$ 412,100**

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92046
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Peri-Urban Information Network

TASK MANAGER: Campbell

TASK ORIGIN: TAS 045

AUDIENCE: Applied researchers in W & S peri-urban issues

LOCATION: Worldwide

OBJECTIVES: 1. Develop a network of applied researchers involved in W & S peri-urban issues. 2. Publish newsletter on applied research.

SCHEDULE: FY 92

SKILLS: Information management

PERSONNEL: Dan Campbell, TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	15 /15
FY92 COST:	15,000
TOTAL COST:	15,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92047
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: Rainwater Harvesting Information Network

TASK MANAGER: Campbell

TASK ORIGIN: TAS 052

AUDIENCE: Organizations and individuals involved in rainwater harvesting

LOCATION: Worldwide

OBJECTIVES: 1. Publish 2 - 3 newsletters per year for network members. 2. Respond to information requests. 3. Maintain databases.

SCHEDULE: FY 92

SKILLS: Information management

PERSONNEL: Dan Campbell, Carl Lindblad, Craig Hafner, consultants

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	15 /15
FY92 COST:	12,000
TOTAL COST:	12,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92048
TASK:

DATES: BEGIN 10/01/91
FIELD
END 09/30/92

TASK TITLE: WASH/VBC Guinea Worm Disease Information Center

TASK MANAGER: Campbell/Nayeri

TASK ORIGIN: TAS 046

AUDIENCE: Organizations interested and involved in the control of Guinea Worm Disease

LOCATION: Worldwide

OBJECTIVES: 1. Translate and distribute French language Guinea Worm Wrap-Up.
2. Maintain active network of researchers and field staff involved in GWD control.

SCHEDULE: FY 92

SKILLS: Information management

PERSONNEL: Dan Campbell, Ellen Nayeri - VBC

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	10 /10
FY92 COST:	4,000
TOTAL COST:	4,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 3

CODE: 92049
TASK:

DATES: BEGIN 04/01/92
FIELD NONE
END 12/31/92

TASK TITLE: Decentralizing Water and Sanitation Services (Year 2)

TASK MANAGER: Rosensweig

TASK ORIGIN: TAS 256

AUDIENCE: R&D/Health

LOCATION: Washington, DC

OBJECTIVES: Complete the task begun in FY 91.

SCHEDULE: 1. Review the first draft. 2. Produce final report.

SKILLS: Institutional development

PERSONNEL: F. Rosensweig, E. Salt, D. Edwards

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	15 /15
FY92 COST:	10,000
TOTAL COST:	60,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92050
TASK:

DATES: BEGIN 01/01/91
FIELD variable
END 09/30/92

TASK TITLE: Sustainability in Water Supply and Sanitation - Phase II

TASK MANAGER: Roark

TASK ORIGIN: 1990 Annual Plan Meeting

AUDIENCE: USAID, other donor organizations, host country planners

LOCATION: Washington, DC and related countries

OBJECTIVES: Two Phases. First phase was to cover definitions of sustainability, literature search, and selection of field sites. Second phase is to complete field visits and write report.

SCHEDULE: First Phase to be conducted in 3rd, 4th quarter of 91 and first quarter of 92. Second phase will continue in 2nd, 3rd and 4th quarters of 92.

SKILLS: Engineering, health, institutional development, community participation

PERSONNEL: P. Roark, J. Hodgkin, A. Hoadley, P. Koplan, E.B. Attah

FOLLOW-UP: None

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	70 /145
FY92 COST:	46,100
TOTAL COST:	106,000
FY92 BUYIN:	

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WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92051
TASK:

DATES: BEGIN 12/02/91
FIELD NONE
END 03/16/92

TASK TITLE: Technical Note on Cholera Prevention Options

TASK MANAGER: Bendahmane

TASK ORIGIN: 1991 Staff Retreat

AUDIENCE: Government officials and development assistance organizations active in W & S activities in L.A.

LOCATION: WOC

OBJECTIVES: To prepare & publish a Technical Note on Cholera Prevention Options. The note will be based on the results of a FY91 task "Cholera Prevention: Assessing the Options." (This will be the 4th technical note.)

SCHEDULE: December - January 1991-92: Write the note based on the final report prepared by the FY91 task mentioned above. February - March: review, revise, publish, and distribute the Note.

SKILLS: Writing ability, familiarity with water, sanitation and health issues in development assistance

PERSONNEL: TBD

FOLLOW-UP: None

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	8 /8
FY92 COST:	10,000
TOTAL COST:	10,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 4

CODE: 92052
TASK:

DATES: BEGIN 07/01/92
FIELD NONE
END 09/30/92

TASK TITLE: Application of Storyboard Presentation

TASK MANAGER: Bendahmane

TASK ORIGIN: 1991 Staff Retreat

AUDIENCE: WASH staff & consultants

LOCATION: WOC

OBJECTIVES: To develop and implement plans for using the Storyboard Presentation prepared under TAS 258 to best advantage.

SCHEDULE: July - August: Set up a task force that will brainstorm ideas for widest dissemination of the Storyboard. September: Implement the plans.

SKILLS: Good communication skills, knowledge of WASH and WS&S sector, understanding of how A.I.D. mission operates

PERSONNEL: TBD

FOLLOW-UP: Possibility for future tie-in with Collaborative Council's IEC Committee activities

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	9 /9
FY92 COST:	10,000
TOTAL COST:	10,000
FY92 BUYIN:	

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 2

CODE: 92053
TASK:

DATES: BEGIN 01/01/92
FIELD NONE
END 09/30/92

TASK TITLE: Highlighting Sanitation Needs in Peri-Urban Areas

TASK MANAGER: Roark

TASK ORIGIN: June 1991 Annual Plan Meeting

AUDIENCE: USAID, other donor organizations, host country planner

LOCATION: Washington, DC

OBJECTIVES: 1. Prepare a brief issues paper on sanitation needs. 2. Conduct a workshop for experts on subject. 3. Write a short document summarizing state of the art emphasizing sanitation needs. (See attached.)

SCHEDULE: 2nd quarter 92: Prepare issues paper. 3rd quarter: Workshop. 4th quarter: Write report.

SKILLS: Specialist in peri-urban sanitation

PERSONNEL: TBD

FOLLOW-UP: None

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	40 /40
FY92 COST:	35,000
TOTAL COST:	35,000
FY92 BUYIN:	

HIGHLIGHTING SANITATION NEEDS IN PERI-URBAN AREAS

CODE 92053

Rationale

The water and sanitation sector has to date focussed much of its energy and interest in water. Sanitation needs and problems—especially in the peri-urban areas—have been largely ignored. This lack of attention is not commensurate with the significance and scale of the problem of highly populated, dense communities literally awash in human excreta. Similar conditions in a refugee camp, for example, would create enormous public outcry. But even the few institutions who recognize the problem and want to do something about it are finding that there is very little knowledge or experience on how to constructively address the problem.

Description

The primary purpose of this task is to increase awareness of the existence of a serious and significantly large problem of inadequate disposal and management of human excreta in the growing peri-urban areas of cities throughout the developing countries. The magnitude of the existing urban sanitation conditions will be dimensioned and then analyzed from the view of different disciplines including: technical, health, institutional, financial, behavioral (community and individual), legal, and environmental. This activity should result in a state of the art statement of what we know and don't know and set the agenda for future work and research.

Approach

It is envisioned that this task will be a product of a facilitated interdisciplinary one-day gathering of WASH staff plus selected relevant guests. The results of this workshop would then be supplemented by interviews, and a review of existing literature and relevant ongoing research by the World Bank, A.I.D.'s Office of Housing and Urban Development, and others. The findings would then be written up in a journalistic style and perhaps complimented with a slide show.

Audience: A.I.D. health officers and host country officials

Approximate Cost

Person days/Labor cost	40 days /	$30,000
ODC's		5,000
Approximate total cost		35,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 2

CODE: 92054
TASK:

DATES: BEGIN 01/01/92
FIELD NONE
END 12/01/92

TASK TITLE: Understanding the Constraints of Urban Formal Sectors

TASK MANAGER: Perez

TASK ORIGIN: June 1991 Annual Plan Meeting

AUDIENCE: USAID Project Officers, WASH staff & consultants, host country officials

LOCATION: Washington, DC

OBJECTIVES: To identify existing structural constraints that prevent both public and private sector formal institutions from providing access to informal settlements. (See attached.)

SCHEDULE: January 1 - May 1: Conduct literature review, individual interviews and working session to synthesize findings. May 1 - September 1: Produce report and seminar.

SKILLS: Individuals with experience dealing with formal and informal sectors in developing countries

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	40 /40
FY92 COST:	35,000
TOTAL COST:	35,000
FY92 BUYIN:	

UNDERSTANDING THE CONSTRAINTS OF URBAN FORMAL SECTORS

CODE 92054

Rationale

It is now broadly recognized that most cities in the developing countries are experiencing explosive growth. The basic shelter (including water and sanitation) needs of the urban population are being largely met through an informal accommodation process that can roughly be described as: families occupying land, building a shelter, individually accessing basic water and sanitation services, buying the land they are living on, planning and accessing community infrastructure, and, getting official recognition for the settlement (formalizing). This informal sector is today far and away the major actor in trying to meet the water and sanitation needs of up to 80% of some urban populations. Nevertheless, the process is the exact opposite of formally accepted and legal processes for urban planning and urbanization and, as such, is perceived as an illegal activity. The formal sector institutions such as municipalities, water and sanitation agencies, finance institutions and even external support agencies such as A.I.D. are often structurally and legally constrained from intervening in the informal sector communities. As a result, they are playing less and less relevant roles in meeting the needs of the majority of poor urban families.

Description

The primary purpose of this task is to identify existing structural constraints that prevent both public and private sector formal institutions (including municipalities and national water and sewerage agencies) from providing access to water and sanitation services for the poor families living in the urban informal sector. Areas that are expected to be important include forms of community organization, per capita costs and affordability, availability of water and financial resources, financial norms, land tenure, institutional arrangements and, existing land urbanization regulations and legislation. The product of this activity would be a document that sheds light on an important but currently poorly understood problem experienced in most of the cities in developing countries today. The document will also provide ideas (and possibly examples) on how to create a bridge between the formal institutions and the informal sector.

Approach

This task would involve a review of current relevant literature, individual interviews, a working session to synthesize the findings, a report and, a seminar to present the results.

Audience: A.I.D. officers, WASH staff and host country officials.

Approximate Cost

Person days/Labor cost	40 days /	$30,000
ODC's		5,000
Approximate total cost:		35,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: LAC
COUNTRY:
QUARTER:

CODE: 92055
TASK:

DATES: BEGIN 10/01/91
FIELD NONE
END 02/01/92

TASK TITLE: Cholera Prevention: Assessing the Options

TASK MANAGER: TBD

TASK ORIGIN: Discussions with AID personnel

AUDIENCE: S&T/H; USAID/LAC; AID Mission directors and health officers

LOCATION: Washington, DC

OBJECTIVES: To present a concise review of program and planning options for cholera prevention. (See attached.)

SCHEDULE: Begin 1 October 1991; End 1 February 1992

SKILLS:

PERSONNEL: WASH Staff and writer

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	28 /28
FY92 COST:	30,000
TOTAL COST:	30,000
FY92 BUYIN:	

CHOLERA PREVENTION: ASSESSING THE OPTIONS

CODE 92055

Rationale

There is a growing recognition among LAC countries and missions that cholera is a threat, that cholera prevention requires attention to WS&S needs, and that the time to begin addressing the problem is now. Perhaps because of years of neglect, there appears to be little understanding about how to proceed in this area. The elements of a cholera prevention program, including water quality, water quantity, sanitation, hygiene behavior change, and wastewater treatment, need to be clearly presented with a discussion of what addressing each element entails in practical terms. Guidance is also required on how to set priorities, for example, when wastewater treatment would be a high priority and when it would be a lower priority. These messages, which capitalize on current interest in cholera, would in fact be of general importance and applicability in the WS&S sector.

Description

This task proposes to present a clear, concise review of program and planning options for cholera prevention at the country level through environmental improvements. The task will draw on the WASH Peru experience as a case study to illustrate what makes an environment conducive to the spread of cholera and an approach to assessing and addressing the problems, including lessons learned. The goal will be a document that will aid in understanding the elements of a cholera prevention program and the range of issues that must be addressed to set priorities and improve programs to prevent cholera.

Approach

This document would be developed based on the WASH Peru experience and general WASH experience and expertise. The product would be a short (about 10 pages) expanded "information sheet" type document.

Audience

The primary audience for this document would be A.I.D. mission directors and health officers, and national health and WS&S planners and policy makers. Secondary audiences would be the LAC bureau, S&T/H, A.I.D. contractors, NGO's, and international agencies concerned with cholera control and WS&S.

Approximate Cost

Person Days/Labor Cost	28 days /	$21,000
ODC's		9,000
Approximate total cost		30,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 1

CODE: 92056
TASK:

DATES: BEGIN 10/01/91
FIELD NONE
END 09/30/93

TASK TITLE: Assessing the Effectiveness of Wastewater and Solid Waste Management

TASK MANAGER: Rosensweig

TASK ORIGIN: June 91 Annual Planning Meeting

AUDIENCE: USAID missions and bureaus

LOCATION: Washington, DC

OBJECTIVES: 1. Clarify options for assessing and improving management of solid waste and wastewater in developing countries. 2. Develop an assessment tool for choosing among the options. (See attached.)

SCHEDULE: 1. Develop framework to define options. 2. Elaborate each option. 3. Formulate strategies how options relate and develop assessment tool. 4. Field test assessment tool.

SKILLS: Environmental engr, economist, institutional analyst, legal, regulatory specialist

PERSONNEL: TBD

FOLLOW-UP:

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	100 /173
FY92 COST:	90,000
TOTAL COST:	160,000
FY92 BUYIN:	

ASSESSING THE EFFECTIVENESS OF WASTEWATER AND SOLID WASTE MANAGEMENT

CODE 92056

Rationale

WASH has developed a broad approach to the assessment of the water and sanitation sector which includes not only the engineering aspects, but also the supporting institutional, regulatory, financial, and social issues. This task proposes to apply that same broad outlook to the area of wastewater and solid waste management rather than proceeding in a piecemeal fashion. Because A.I.D.'s experience in water pollution and wastewater management is limited, we propose to first develop a framework, which would result in an interim product which would improve understanding of A.I.D. missions of the options available to them. In the second phase of the task each option would be explored in more depth. In the third phase, this experience would be synthesized and an assessment tool developed. This tool would help missions to assist countries develop programs and set priorities for the management of wastewater and solid waste.

Description

This is a major WASH task proposing to improve understanding of the options available to A.I.D. missions for managing wastewater and solid waste to avoid water pollution and eventually develop an assessment tool for choosing among the various options. A preliminary list of the options includes the following: legal and regulatory, institutional, technical, educational, economic and financial, and public involvement. This task would be carried out in three phases. The first phase would be the development of a framework of the options for managing wastewater and solid waste. The second phase would consist of more in-depth study of the various options. This would involve field visits along with experience gained from field activities. The third phase would be the development of a comprehensive assessment tool for choosing among the various options.

Approach

This task would involve the development of an overall framework through a review of relevant literature and the experience of knowledgeable consultants, in-depth studies of specific areas in the framework involving visits to countries which have had some success in wastewater and/or solid waste management, a synthesis meeting bringing together the various parts of the framework to develop an assessment tool, and a seminar to present the results.

Audience

- WASH staff and consultants
- Project officers for A.I.D. and other external support agencies
- Host country decision-makers

These groups would use the interim framework to improve their understanding of what the options are. The assessment tool would be used to write terms of reference, design projects, structure field assignments, and assess the solid waste and wastewater management situation in a country.

Approximate Cost

Person Days/Labor cost		173 days /	$130,000
ODCs			30,000
Approximate total cost			160,000
	Year 1	Phase I -	30,000
		Phase II -	60,000
	Year 2	Phase II (cont.)	30,000
		Phase III	40,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 2

CODE: 92057
TASK:

DATES: BEGIN 03/01/92
FIELD NONE
END 03/31/93

TASK TITLE: Maximizing Health Impact: Programmatic Tools for Project Monitoring and Improvement

TASK MANAGER: Yacoob

TASK ORIGIN: June 1991 Annual Plan Meeting

AUDIENCE: Project managers responsible for implementing and monitoring hygiene behavior change

LOCATION: Washington, DC

OBJECTIVES: Phase I- develop an operational manual on designing and establishing a comprehensive project monitoring information system. (See attached.)

SCHEDULE: April 1992: TPM. May - August 1992: Complete draft. October - December 1992: Field test in 2 different countries.

SKILLS: Management specialist, social scientist, epidemiologist

PERSONNEL: TBD

FOLLOW-UP: Phase II- Develop training manual on identification of hygiene behviors. Scope and budget to be determined.

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	40 /40
FY92 COST:	40,000
TOTAL COST:	40,000
FY92 BUYIN:	

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MAXIMIZING HEALTH IMPACT: PROGRAMMATIC TOOLS FOR PROJECT MONITORING AND IMPROVEMENT

CODE 92057

Rationale

Evaluation of WS&S programs has been focussed primarily on mid-term and final evaluations and has focussed on direct inputs(money, commodities, labor), implementation activities, and direct outputs(primarily hardware and hygiene education activities). Health impacts are often discussed but seldom measured for reasons of cost and technical difficulty. Hygiene behavior change is recognized to be the link between direct outputs, such as hardware services, and health impacts. Hygiene education programs have been included in WS&S programs to ensure health impact but hygiene behavior change has proved to be a difficult and complex process and effectiveness of hygiene education programs to change behavior is seldom measured. In order to maximize the health impact of WS&S programs, programs should be expanded to include monitoring as well as a process for using monitoring data for prospective evaluation, problem identification and solution development—leading to program change and continuous program improvement. Such an activity would pull together recent advances in: defining and monitoring hygiene behaviors; management information systems; and, program management methodologies for continuous improvement.

Description

This task will have a programmatic focus on the processes involved in the identification and monitoring of interventions aimed at maximizing the health impacts of water supply and sanitation projects. The task will consist of two separate operational tools. The first product of this task is an operational manual on designing and establishing a comprehensive project monitoring information system (computerized or otherwise). In addition to the practical guidelines, the manual will present a methodology for using monitoring data for programmatic adjustments and for continuous improvements. The second product is a training manual on identification of hygiene behaviors and the relevant indicators for monitoring and evaluation. This task will enable project managers to focus on the processes that need to be established in order to improve programs and adapt them to changing contextual realities rather than pre-determined interventions. In programs where hygiene behavior change is central, such tools will address the dynamic processes in the design and implementation of effective water supply and sanitation programs.

Approach

This task would involve a review of current literature and individual interviews with selected experts and organizations. The final product would be two manuals which would be developed and field tested in collaboration with a national or regional developing country organization. These manuals will provide practical guidelines for the identification of hygiene behaviors and indicators, establishing and maintaining comprehensive program monitoring systems, and establishing processes for continuous program evaluation and improvement.

Audience

- Program planners and donor agencies.
- Project staff implementing water supply and sanitation projects
- Project and national staff implementing any preventive health programs.
- National staff from ministries responsible for water supply and sanitation, with a strong health perspective.
- NGOs implementing water supply and sanitation with strong community health focus.

Approximate Cost—Phase I Operational Manual

Person days/ Labor cost	40 days /	$30,000
ODC's		10,000
Approximate total cost		40,000

Approximate Cost—Phase II Training Manual

To be determined.

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 2

CODE: 92058
TASK:

DATES: BEGIN 01/01/92
FIELD NONE
END 12/01/92

TASK TITLE: Analytical Framework to Address Financial Viability in WS&S Projects

TASK MANAGER: Walker

TASK ORIGIN: June 91 Plan Meeting; FY91 Annual Plan Meeting

AUDIENCE: USAID Project Officers, WASH staff & consultants, host country officials

LOCATION: Washington, DC

OBJECTIVES: To develop an analytical framework of important factors/issues involved in financing water supply and sanitation at the sector level. (See attached.)

SCHEDULE: January 1 - April 1: Conduct literature review. May 1 - July 1: Draft document and circulate for review. August 1 - September 1: Finalize paper and conduct seminar to present results.

SKILLS: Water resource/water supply economist, water resource/water supply planner, financial analyst, institutional specialist

PERSONNEL: TBD

FOLLOW-UP: TBD

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	57 /57
FY92 COST:	50,000
TOTAL COST:	50,000
FY92 BUYIN:	

ANALYTICAL FRAMEWORK TO ADDRESS FINANCIAL VIABILITY IN WS&S PROJECTS

CODE 92058

Rationale

Financial viability is a fundamental premise for sustainability in the water supply and sanitation sector. The implications of a financially non-viable sector are the increasing deterioration in service and the inability to expand coverage—especially to the poor. Sector sustainability should also take into account the consideration of the cost of water pollution and the links to the deterioration in water resources, and the rising cost of exploiting new water sources. WASH needs to develop an understanding of how current constraints and new approaches in sector financing strategies can move the sector forward. WASH has built up a certain expertise in the financial management of urban water institutions and has concentrated on water agency specific financial interventions. It is important for WASH to promote a clearer understanding of the dynamics of financing of water supply and sanitation at the sector level.

Description

The experience of the last decade shows that inadequate attention given to sector financial issues leads to service disruption and deterioration with little scope for self-financed expansion to increase coverage. At the policy level correct financing strategies for the water supply and sanitation sector must be in place given the realities of the 1990s—external debt ceilings, environmental degradation and increased urbanization—if the sector is to operate at all effectively. Important issues to be addressed include continued heavy reliance on external financial sources, the increasing demand for centrally financed government subsidies and the inability of sector institutions to implement a rational and effective pricing policy. In addition, decision makers must consider the difficult trade-offs in equity and sustainability in dealing with the increasing real cost of water due to source depletion and environmental degradation. The major outcome of this task would be to make clear the issues that need to be addressed for effective sector financial policy formulation and prioritize these issues.

Approach

The main product is a concept paper which brings together a succinct exploration of financial issues of the sector for the 1990s and will be prepared at a suitable level to reach a multidisciplinary audience. The paper will depend on a literature review of current work in water policy and where possible will catalogue recent WASH experience from Sri Lanka, Indonesia, Ecuador, Honduras, etc. A workshop will be held based on an initial issues paper. A seminar will be held to present results of the main paper. As appropriate, a simple computer model will be developed to illustrate consequences due to lack of realistic financial policies.

Audience

USAID Project officers and other external support agencies, WASH Staff and consultants, and host country decision makers.

Approximate Cost

Person days/Labor Cost	57 days /	$43,000
ODCs		7,000
Approximate total cost		50,000

WASH III PROJECT FY 1992

TASK SHEET

BUREAU: R&D/Health
COUNTRY: USA
QUARTER: 3

CODE: 92059
TASK:

DATES: BEGIN 04/01/92
FIELD NONE
END 07/30/92

TASK TITLE: Making Interdisciplinary Teams Work

TASK MANAGER: Bendahmane

TASK ORIGIN: 1991 Staff Retreat

AUDIENCE: W&S consultants who work on interdisciplinary teams, AID project officers, WASH staff, ESA personnel

LOCATION: WOC

OBJECTIVES: To prepare and publish a guidebook on the key issues that need to be addressed in fielding interdisciplinary teams. (See attached.)

SCHEDULE: 1. April-June: collection of info through interviews, debriefings, focus groups and questionnaires. 2. July-August: Write guidebook. 3. August-September: Review, revise, publish and distribute guidebook.

SKILLS: Training and experience in organizational psychology, training, and/or group dynamics

PERSONNEL: TBD

FOLLOW-UP: None

R&D CONTACT: John H. Austin

APPROVED BY: _____

DATE: _____

LEVEL OF EFFORT IN DAYS

FY92/TOTAL:	26 /26
FY92 COST:	25,000
TOTAL COST:	25,000
FY92 BUYIN:	

60

MAKING INTERDISCIPLINARY TEAMS WORK

CODE 92059

Rationale

WASH has developed sound, extensive experience in preparing multi-disciplinary teams. The primary mechanism for this has been the Team Planning Meeting (TPM) methodology, which is now well institutionalized in WASH. This methodology can be taken further and deeper by extending it to what happens in the field. This task would provide the basis for WASH to go as far as possible in developing a methodology that consultants / technical assistance teams can use as a guide for including the varying disciplines of the sector. To ignore this type of task could mean that we rely on personalities and good will for the effective outcome of technical assistance.

Description

This task proposes to describe how multi-disciplinary teams can be helped to function effectively in the field. Examples of the kinds of issues included will be how teams are prepared, how they interview and collect data from different disciplinary perspectives, how they analyze the data, and how they make recommendations and develop strategies that integrate varying perspectives. The major outcome of the task would be a practical guide for team leaders on the key issues that need to be addressed in fielding multi-disciplinary teams. The task will also provide a framework for carrying out a multi-disciplinary field assignment.

Approach

This task, which will build on the experiences over the years of WASH staff and consultants, will outline the complex nature of the interactive process between people from different disciplines and propose guidelines for multi-disciplinary approaches to problem solving. The final product will be a practical guide for team leaders on how to implement field assignments from a multi-disciplinary perspective, including lessons learned.

Audience

Project officers of A.I.D., other A.I.D. contractors, and other external support agencies and WASH staff and consultants whose responsibility it is to lead technical assistance teams. These individuals would use the guide to write terms of reference, design field activities, and find solutions to problems of interactive work.

Approximate Cost

Person days/Labor cost	26 days /	$20,000
ODCs		5,000
Total approximate cost		25,000

Annex

WASH III CONTINUING TASKS

Listed below are 70 tasks initiated under WASH III, FY89, FY90 and FY91, that will be continued and worked on in FY92. These tasks are in various stages of completion. Although no FY92 funds are budgeted or required for these tasks, they are included in this work plan because they will require management and administrative support from the WASH Operations Center.

TAS 027	Institutional Framework for RWSS
TAS 031	Guidelines for Rehabilitation to Sustain Rural Water Supply Systems
TAS 039	Private Sector Water Supply in Peri-urban Areas
TAS 040	Models for Institutionalization of Community Participation Programs
TAS 056	Economic Benefits of Improved Water Supply and Sanitation
TAS 060	Variation in Rural Water Demand
TAS 063	Factors Affecting Mobilization for Rural Sanitation
TAS 066	Indicators and Methodologies for Evaluating Community Participation
TAS 070	Guidelines for Financial Planning of WS&S Institutions
TAS 078	Upgrading the Team Planning Meeting Guide
TAS 080	ECUADOR: Coordination Activities for T.A. to RHUDO
TAS 083	Cost-of-Illnesses Methodologies
TAS 131	Development of Operations and Maintenance Training Guide
TAS 137	ZAIRE: O&M Study—Phase II
TAS 141	Financial Management Guidelines
TAS 151	Cost Recovery for WASH Reports
TAS 153	Rapid Assessment of the Prevalence of WS&S Related Diseases
TAS 154	Maximizing the Economic Impact of Urban Water Supply and Sanitation Investment
TAS 160	Preparation of "Guidelines for Water Re-Use"
TAS 161	Community Participation: Issues Paper in Peri-urban (Housing)
TAS 162	Models of O&M Management
TAS 165	Village Committee Manual for Financial Management
TAS 168	Performance Indicators
TAS 170	An Economic Consideration of WS&S Coverage Targets
TAS 171	Workshop to Review Statistical Analysis of Health Interventions Related to Child Survival
TAS 178	TUNISIA: Training Materials for Pump Operators
TAS 182	TUNISIA: General Planning & Administration
TAS 183	TUNISIA: Development of Training Program for Hygiene Education
TAS 184	AFDB Water and Sanitation Manual - Phase II
TAS 185	Privatization of Water Utilities
TAS 186	INDONESIA: Guidelines for Private Sector Participation in Urban Water Supply
TAS 188	Preparation of State-of-the-Art Technical Information
TAS 191	A Comparison of the Health Effects of Water Supply and Sanitation in Rural and Urban Settings

TAS 192	Development of an Interim WASH Health Strategy
TAS 216	HAITI: Solid Waste Management
TAS 219	LAC Bureau WS&S Coverage Planning Documents—1990 Update
TAS 223	Final Revision of the WASH Pump Selection Manual
TAS 224	TUNISIA: TOT for Hygiene Educators
TAS 225	LAC Environmental Health Indicators
TAS 226	TUNISIA: Water System Policy and Procedures
TAS 230	OMAN: Groundwater Data Collection and Management
TAS 234	Geographic Information Systems
TAS 235	MALI: CARE Integrated WS/S-CDD Workshop in Macina
TAS 237	WASH/UNDP-WB Development and Support of GARNET
TAS 238	BANGLADESH: Collaboration with ICDDR/B
TAS 239	TUNISIA: General Planning & Administration II for Ongoing T.A.
TAS 243	CENTRAL AMERICA: Planning for Coordinated International T.A.
TAS 244	TUNISIA: Social Marketing of WUAs
TAS 247	Sector Meeting for African Non-Governmental Organizations
TAS 249	ECUADOR: WASHED Coordination for Years Two and Three
TAS 251	Sustainability in Water Supply and Sanitation: Phase I
TAS 254	OMAN: Water Management (Task 5)
TAS 255	OMAN: Technology Development (Task 6)
TAS 256	Decentralizing Water and Sanitation Services
TAS 257	Cholera Task Force
TAS 258	Computer Graphics Storyboard Presentation
TAS 260	HAITI: TOT for Hygiene Education/Community Development
TAS 261	YEMEN: Strengthening of O&M Program
TAS 262	MALI: Technical Assistance to Examine Health Effects of Dams in the Dogon Country
TAS 263	Danube River Basin Study: Preparation and Planning
TAS 264	Collaboration with AIT & Participation in RWH Conference
TAS 265	EL SALVADOR: Water Contamination Survey
TAS 266	WS&S Collaborative Meeting in Oslo, Norway
TAS 267	ECUADOR: Advanced TOT for WASHED- Phase III
TAS 268	BENIN: Final Evaluation of Water Supply and Sanitation Project
TAS 269	BURKINA FASO: DORN Workshop
TAS 270	NICARAGUA: TA for Cholera Preparedness and WS&S Institutional Assessment
TAS 271	Danube River Basin Study - Stage 1
TAS 272	NIGERIA: Development of a WS/S Strategy
TAS 273	Public Sector Involvement in Environmental Issues