STRATEGIC OBJECTIVE
No. 519-004

"Increased Access by Rural Households to Clean Water"
1998-2005

CLOSE-OUT REPORT

USAID EL SALVADOR
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Antiguo Cuscatlán, La Libertad
El Salvador, Centro América

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CLOSE-OUT REPORT

SO Name: Increased Access by Rural Households to Clean Water

SO Number: 519-004

Approval Date for SO: September 30, 1998

Performance Period: September 30, 1998 to September 30, 2005

Country: El Salvador

I. SUMMARY OF OVERALL ACTIVITY IMPACT

OVERVIEW.
The Strategic Objective (SO) *"Increased Access by Rural Households to Clean Water*, and its Results Framework were approved by Washington on October 7, 1997. The Mission developed a New Activity Document (NAD) for the Access, Management and Rational Use of Water (AGUA). The purpose of AGUA was to provide access to clean water by rural Salvadorans through the promotion of a sustainable, replicable and integrated approach to water resource management. The AGUA Activity was approved on September 24, 1998 at an original funding level of $15.6 million, for an expected duration of four years (from September 30, 1998 through September 30, 2002). A three year Strategic Objective Grant Agreement (SOAG) with the Government of El Salvador (GOES) was also signed in September 1998. A Life Of Activity (LOA) funding increase was authorized on May 22, 2000, for a new total of $17.2 million due to the need to address two key activities not originally contemplated in the NAD: waste water treatment and water policy reform. On July 18, 2001 the AGUA Activity Completion Date (ACD) was extended to September 30, 2003 following the earthquakes in 2001. The Life of SO funding was increased by LAC to $25.0 million. The GOES total counterpart contribution provided through participating public institutions was $1,074,333.

As a result of the Strategy extension and a very positive Activity mid-term evaluation in October 2002, the AGUA Activity was further amended to increase its LOA to $24,707,750 and extend its completion date to March 31, 2005 and then to September 30, 2005. The SOAG was extended to March 31, 2005 for program implementation and to September 30, 2005 for program close out. Obligations under the SOAG totaled $23,982,750. The SOAG mortgage at the end of the program was $725,000 (2.9%).

The SO's Access, Management, and Rational Use of Water (AGUA in Spanish) final Result Framework included the following intermediate results: 1) Improved quality of water sources, 2) Improved performance of water delivery systems, 3) More effective citizen actions to address water issues, and 4) Improved municipal management of water resources. IR 4 was further modified to "Greater municipal participation in water resources management." Rural resident access to clean water - water defined as available when they needed it and at a sufficient quality to preserve human health - was the number one priority in all Activity areas. The Activity funded six cooperative agreements and seven contracts worth $21.6 million with $7.8 million of cost sharing. Implementation began in June 1999 with the signing of a cooperative agreement with Cooperative for Assistance and Relief Everywhere, CARE El Salvador for $11 million. CARE managed a consortium of three local NGOs, FUNDAMUNI (Fundación de Apoyo a Municipios de El

Salvador), SalvaNatura (Fundación Ecológica de El Salvador), and SACDEL (Sistema de Asesoría y Capacitación para el Desarrollo Local) carrying out improved water management efforts in 18 municipalities and three departments. When the SO and AGUA activity were extended in 2002 the CARE cooperative agreement was eventually increased to a total funding of $17,682,685 and eventually leveraged over $6.64 million in cost sharing.

USAID's AGUA carried out interventions within three departments, Ahuachapan, Usulutan, and Morazan that included three major watersheds, 14 sub-watersheds, and the following 18 municipalities: San Francisco Menendez, Guaymango, Jujutla, San Pedro Puxtla, Usulutan, Jiquilisco, California, Alegria, Puerto El Triunfo, Mercedes Umaña, Tecapan, Santiago de Maria, Berlin, San Agustín, San Dionisio, Ozatlan, San Francisco Javier, and Corinto.

SPECIFIC ACHIEVEMENTS.

Through the CARE Consortium cooperative agreement USAID implemented the majority of Activity efforts and leveraged the greatest local cost sharing of $6.64 million. The overall Activity achievement was providing 65% of targeted rural Salvadorans with access to clean water. This level of access is nearly three times the national average of 21% for rural areas and represents more than 173,000 people with access to clean water.

Below are the key achievements by Intermediate Result:

IR 1: Improved Quality of Water Sources.

Key achievements:

- Nearly 13,159 rural households were the direct beneficiaries of solid and liquid waste management and treatment facilities.
- Three (3) sewage treatment plants and four (4) solid waste disposal centers are now serving over 81,000 people and are managed locally with locally generated operating funds.
- Approximately 36,060 hectares covered by improved practices including soil conservation, reforestation, organic cropping and integrated pest management.
- Water quality study was carried out that indicated that the majority of water in a sample group was contaminated by domestic sewage, which spurred awareness campaigns.
- Appropriate technology sewage treatment seminar was conducted that drew attention to contamination issues and attracted national attention.
- Two decentralized sewage treatment plants were implemented using appropriate technology processes that linked potable water service and sewage treatment under the same management and user tariff structure.

Efforts were also carried out to develop a potable water system support service which provides both administrative training and support to local water committees in order to improve water system sustainability. Major threats to sustainability had been identified and fact-finding trips indicated that no effective model was currently in use in the region. This service, paid for by user fees, currently assists thousands of water system clients in rural El Salvador, helping to guarantee access to clean water.

IR 2: Improved Performance of Water Delivery Systems.

Key achievements:

- One hundred and twenty-five (125) water systems were built, rehabilitated or expanded, providing household delivery of clean, reliable water to over 40,000 rural families in the 18 municipalities, surpassing the target by three systems.
- Eight (8) municipalities now operate water delivery systems.
- Forty thousand sixty eight (40,068) households now pay the full cost of clean water services.
- Fifteen thousand two hundred seventy one (50,271) local organization members and technicians trained on different aspects of water management methodologies.
- Thirteen water collection and storage reservoir systems are operating and generating both income and local interest in drought mitigation.
- 10,000 cubic meters of surface water diversion, storage, and use facilities constructed to mitigate drought conditions.
- Eighteen water systems built, serving 15,544 people, carried out through the Small Infrastructure Activity (SIA). Systems included metered household connections, hydro-geologic studies, grey water disposal, and a tariff plan approved by the community. SIA generated $236,943 in cost sharing contributions.

IR 3: More Effective Citizen Actions to Address Water Issues.

Key achievements:

- Ninety nine percent (99%) of targeted Salvadorans learned at least one cause and one consequence of unclean water.
- Ninety nine percent (99%) of targeted Salvadorans learned at least one solution for unclean water.
- Three hundred eleven (311) organizations worked on water-related issues.

The creation and strengthening of the Local Development Committees generated permanent democratic mechanisms for public participation. These committees assumed the decision-making role of analyzing, discussing and reconciling for the entire municipality thus promoting good governance and allowing for more effective citizen participation on topics related to water resources and the management of micro watersheds.

In addition, the integration of Municipal Development Plans promoted population awareness and involvement at all levels of decision-making in order to resolve problems, which is key for sustainable local development.

IR 4: Greater Municipal Participation in Water Resources Management.

Key achievements:

- Forty three (43) water-related ordinances were established, greatly improving the effective management at the municipal water level.
- Participating municipalities dedicated 10% of their budgets to water-related projects.
- A water systems association, the first of its kind in the country, was formed and legalized and is providing technical and administrative support services to more than 24,000 clients – mitigating the greatest obstacle, which is the ability to sustain rural water systems.
- Eighteen watershed organizations (WSOs) were developed to enhance local technical and management capacity.

In order to improve municipal management of water resources, the GOES requested that USAID support ANDA in its efforts to pass a national water law. In response, USAID established a water policy unit (WPU) within the CARE Consortium tasked with responding to policy reform needs. The water policy project funded through Environmental Health Project (EHP)/Camp Dresser & McKee (CDM), and coordinated with the CARE WPU, produced many evaluations and public outreach events that increased both education and awareness of water policy issues. The GOES draft water law was thoroughly reviewed and vetted and found to contain major flaws. Concerns were successfully communicated to ANDA. A regulation establishing watershed organizations was developed and submitted to the Ministry of the Environment (MARN). Although neither ANDA nor MARN ever submitted draft legislation, MARN was to use the regulation document for inclusion in a water resource law they were to develop in 2005.

The legalization of local development committees and the approval of ordinances by municipal governments was an environmental education opportunity which helped create the conditions for local-water governance. This process now allows for the elaboration of proposals and changes in the local legislation, which in the future, will lead to improved water policy advocacy and laws.

Annex A includes the Final indicator results for the periods 1999-2001 and 2002-2005, as well as, the performance data tables for the indicators 1999-2001. **Annex B** includes a list of evaluations, assessments and special studies conducted during the life of the SO. **Annex C** includes a list of instruments that have been closed out per ADS 202.3.10.1. **Annex D** includes the names of individuals directly involved in the planning, achieving, assessing and learning of the SO. Copies of the CARE and PCI close-out executive summaries reports are included as **Annex E**.

EVALUATIONS/STUDIES. A mid-term Activity evaluation was carried out in October 2002 and reported excellent results, particularly the CARE Consortium's watershed management focus. As a result, cooperative agreements for CARE and PCI were extended by two years to March 31, 2005 in order to continue Activity interventions and increase the focus on watershed management. Also at this time, WE hosted an embassy science fellow to help design a water monitoring model to track watershed management impacts on groundwater. Training interventions under the Human Capacity Development contract included watershed management, water system administration, reservoir design and construction, and environmental impact assessments.

In 2004, WE began the design of the new watershed activity for the new strategy period (2004-2009). As part of their deliverables for potential follow on activities CARE carried out a national watershed study USAID contracted the Tropical Agricultural Research and Higher Education Center (CATIE) to propose recommendations for the region of the country with the highest potential for watershed management investments.

The activity exit strategy, developed during implementation, helped measure the effectiveness of interventions and includes parameters for minimum levels of clean water access, establishment of local management capacity, and measurement of impact on water resources.

The methodologies and lessons learned from the AGUA Activity were used in the design of USAID El Salvador's new watershed management Activity. Activity documents to be used include environmental guidelines for well drilling, the mid-term evaluation, technical reports for reservoirs construction, watershed and municipal diagnostics, and methodologies for establishment of community based associations for participant farmers, potable water systems, and watershed management.

OTHER ACHIEVEMENTS

The Enterprise for the Americas Initiative Fund, El Salvador (FIAES). Though this initiative is not directly funded by USAID, it is monitored by USAID and the Mission Director belongs to the FIAES' administrative council. The Fondo de la Iniciativa para las Américas de El Salvador (FIAES) was created under the Enterprise for the Americas Initiative in 1994 to implement a debt swap program aimed at awarding grants for environmental conservation and improved living conditions in rural El Salvador. FIAES also implements the Tropical Forest Conservation Act (TFCA) Account that was incorporated in 2001. Grants are awarded to non-governmental organizations (NGOs) and community development organizations (ADESCOs) to support their environmental and child development projects. Proposals are evaluated competitively and awards are based on merit. Although no direct financial support was given, the WE provided a good deal of technical assistance towards ensuring that this important mechanism reached its potential.

FIAES awarded 600 grants totaling more than $38 million from its first grant competition. FIAES has achieved transparency and openness in its transactions, gained respect as an institution, and can boast a qualified and motivated professional staff.

II. SIGNIFICANT CHANGES IN THE RESULTS FRAMEWORK AND SUMMARY OF PERFORMANCE INDICATORS USED

IR 4 was changed throughout implementation. Also, changes were made to the indicators to improve efficiency in reporting. The percentage of rural families with access to clean water, nationally, relied on a GOES survey that was never carried out effectively and this indicator was therefore dropped. The definitions of clean water access were also refined to better define both quality and quantity of water. The indicator measuring industries using pollution control was no longer tracked after 2002 due to a lack of information and response from local industries. "Water system costs covered by collected fees" was changed in 2003 to "Households that pay the full cost of clean water services" to more effectively count progress.

The final SO 519-004 Results Framework follows.

USAID
FROM THE AMERICAN PEOPLE

WATER AND ENVIRONMENT PROGRAM RESULTS FRAMEWORK FY 1997-FY 2005

STRATEGIC OBJECTIVE

INCREASED ACCESS TO CLEAN WATER BY RURAL HOUSEHOLDS

Indicators:
- Rural households in target areas with water that meets quality and time standards

Assumptions

-Additional natural disasters do not impinge upon the efforts of the Water and Environment Program.
-Current implementer grants are extended in order to maximize watershed development gains achieved in the previous strategy period.
-The WE office is accorded sufficient level of funding to effectively implement the program.

INTERMEDIATE RESULT 1
IMPROVED QUALITY OF WATER SOURCES
Indicator:
Area Covered by Improved Practices:Soil Conservation/Reforestation, Organic Cropping, and Integrated Pest Management

SUB-INTERMEDIATE RESULTS

Increased use of improved agricultural/conservation practices
Indicator:
Farm units utilizing improved practices

Increased use of improved waste management practices
Indicators:
Households benefiting from improved solid-waste management
Households benefiting from improved wastewater management

Increased use of improved industrial practices
Indicator:
Industries using pollution prevention practices

INTERMEDIATE RESULT 2
IMPROVED PERFORMANCE OF WATER DELIVERY SYSTEMS

SUB-INTERMEDIATE RESULTS

Improved physical infrastructure
Indicator:
Rehabilitated, expanded, and new systems

Improved local management and technical capacity
Indicators:
Local organization members and technicians trained
Households that pay the full cost of clean water services

INTERMEDIATE RESULT 3
MORE EFFECTIVE CITIZEN ACTIONS TO ADDRESS WATER ISSUES
Indicator:
Water related changes resulting from citizen group actions

SUB-INTERMEDIATE RESULTS

Increased understanding of causes and consequences of unclean water
Indicator:
Salvadorans knowing at least one cause and at least one consequence of unclean water

Increased understanding of solutions for unclean water
Indicator:
Salvadorans knowing at least one solution for unclean water

Communities more organized around water issues
Indicator:
Organizations working on water-related issues

INTERMEDIATE RESULT 4
GREATER MUNICIPAL PARTICIPATION IN WATER RESOURCES MANAGEMENT
Indicators:
Water related ordinances passed;
Resources invested in water-related projects

SUB-INTERMEDIATE RESULTS

Improved municipal management of water resources
Indicator:
Municipalities with water resource management plans

National water policy/legislation supports municipalities
Indicator:
Municipalities operating their own water systems

III. PRINCIPAL PARTNERS

PUBLIC PARTICIPATING PARTNERS:

- Asociación Nacional de Acueductos y Alcantarillados (ANDA).
- Ministerio de Agricultura y Ganadería (MAG).
- Ministerio de Medio Ambiente y Recursos Naturales (MARN).
- Dirección General de Recursos Naturales (DGRN).
- Fondo de Inversión Social para el Desarrollo Local (FISDL).
- Selected Municipal Governments.

IMPLEMENTING PARTNERS:

- CARE El Salvador; Cooperative Agreement #519-A-00-99-00084-00
  Award: $17,682,685; Access, Management, and Rational Use of Water;
  Cost Sharing: $6.64 million
- Project Concern International; Cooperative Agreement #519-A-00-00-00066-00
  Award: $1,430,731; Cost Sharing: $563,819
- World Vision Inc., Cooperative Agreement #519-A-00-99-00210-00
  Award: $398,257; Cost Sharing: $200,000
- Catholic Relief Services; Cooperative Agreement #519-A-00-00-00067-00
  Award: $348,463; Cost Sharing: $251,525
- Border Development Services; Cooperative Agreement #519-A-00-00-00064-00
  Award: $43,940; Decentralized Sewage Treatment Plant
- ICCA-CAMAGRO; Cooperative Agreement # 519-A-00-00-00070-00
  Award: $ 391,050; Watershed Management Farm Incentives; Cost Sharing: $159,635
- FUSADES; Contract # 519-C-00-00-00023-00; Add-on to existing EGE contract
  Amount: $150,000
- Hagler Bailly Services, Inc; Contract LAG-I-00-99-00019-00, Task Order #801
  Award: $77,205; Appropriate Waste Water Treatment Workshop
- Camp Dresser & McKee, International, Inc; Contract HRN-I-00-99-00011-00, Task Order #801
  Award: $247,057; Water Policy Initiatives
- Associates in Rural Development; Contract #LAG-1-00-98-00018-00, Task Order #805
  Award: $109,922; Mid Term Evaluation
- CARE El Salvador; Contract #519-O-00-04-00070-00; Award: $52,132; Reservoirs EIA
- CATIE; Contract #519-O-005-00012-00; Award: $24,533; Watershed Study
- Chemonics International, Inc.; Contract #PCE-I-00-99-00003-00, Task Order #823
  Award: $632,945; Reservoir Implementation Project

IV. PROSPECTS FOR LONG-TERM SUSTAINABILITY OF IMPACT OF THE SO

One of the most important impacts resulting from this SO was the development of local technical and management capacity through the creation of local organizations with well trained membership. This impact has a far reaching effect on the sustainability of Activity interventions. Good examples are the 18 watershed organizations (WSOs) developed over the life of activity. These are locally elected memberships, many of which are legalized through the local development association mechanisms and include representation from municipal councils, water system boards, NGOs, residents, the private sector, and GOES agencies like the Ministry of the Environment, ANDA, and the Ministry of Health. These WSOs serve as communication forums which help resolve conflicts over the high demand for diminishing water supplies, and can carry out

conservation interventions. Locally generated revenues destined for environmental conservation, such as potable water system tariffs, can now be paid to WSOs, resulting in more efficient implementation. Another good example is the creation of associations of potable water systems which provide back-up support for both technical and administrative problems for thousands of USAID funded water system users in Ahuachapan and Usulutan. These associations are the first of their kind in El Salvador and provide direct mitigation to the most serious threats to the sustainability of rural potable water systems. A third example is the farmer association, which represents demonstration farmers and provides economy of scale and market access to maximize profits. Three such associations were formed by AGUA.

The demonstration of best practices in the management of water was another important impact, and is characterized by the high quality sub-projects and efforts to guarantee their sustainability. Topping the list are AGUA's demonstration and participant farms, totaling over twelve thousand and carrying out reforestation, soil conservation, organic methods, and agro-chemical management on more than 36 thousand hectares of rural farmlands. Each farm developed an integrated farm plan detailing problems to overcome and actions to carry out and is part of an association of farmers led by the demonstration farm. Income for participant farmers increased from an average of $250/year to more than $1,500/year, greatly improving the quality and security of life. Burning has been virtually eliminated as an agricultural practice in Activity areas.

Municipal water management is another important impact. Forty-three municipal ordinances to better manage water, control pollution, and improve environmental conditions were developed over the life of activity. Municipal councils were active members in all watershed organizations formed by AGUA and this representation greatly improved the effectiveness of management priorities, particularly in those watersheds containing more than one municipality. Many of the municipalities were also closely involved in the implementation and management of potable water systems. Several of these, like Suchitoto and San Francisco Menendez operate potable water, sewage treatment, and solid waste collection and disposal and are models for the rest of the country.

Finally, raising the level of awareness of local residents regarding the causes and consequences of unclean water is another important impact. Ninety-nine percent (99%) of the Activity's target audience is now aware of these issues. This can be credited to the excellent outreach and education programs carried out by AGUA, and by previous USAID environmental programs such as Programa para el Mejoramiento del Medio Ambiente de El Salvador (PROMESA).

V. TOTAL COST OF THE STRATEGIC OBJECTIVE

	Total SO Level $	LOA level $	Obligated $	Disbursed thru 07/26/06 ($)
USAID	**25,000,000**	**24,707,750**	**23,982,750**	**23,507,094**
Local Cost Sharing				**7,892,093**
GOES counterpart				**1,074,333**
TOTAL	**25,000,000**	**24,707,750**	**23,982,750**	**32,473,520**

SO 519-004 OBLIGATIONS FROM FY 1998 THROUGH FY 2004 ($)

Activity	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	TOTAL
519-0443 AGUA	3 ,329,000	3,119,000	3,307,000	3,134,750	3,174,000	4,074,000	3,767,800	23,905,550
Activities managed by USAID/ Washington *		70,000					7,200	77,200
TOTAL	3,329,000	3,189,000	3,307,000	3,134,750	3,174,000	4,074,000	3,775,000	**23,982,750**

*Activities for Policy Component and Environmental Travel Authority.

VI. LESSONS LEARNED

1. The innovation of establishing a consortium of local and international NGOs to pool their particular talents to implement project activities and administrate AGUA resources was successful. Member organizations have learned from each other and have all been strengthened by the process, and have even entered into other consortia to manage other development assistance projects in the country.
2. The use of incentives as an entrance strategy, while important to attract participants to join local organizations, and the testing and adoption of conservationist and/or income-producing technologies, can only be considered successful when participants begin participating and adopting these practices without assistance. Thus, the development and application of the exit strategy is just as important as the entrance strategy.
3. The incorporation of costs of environmental services in tariffs charged to water system users is a fundamental step in ensuring the sustainability of both the integrated water resources/watershed management and local development strategies. The inclusion of a line item in water fees charged to customers of small communal and municipal water systems, although incipient, is a groundbreaking and fundamental step in guaranteeing the sustainability of both water systems and the watersheds that serve them.
4. In treated areas, soil and water conservation practices promoted by the project are having a very positive impact in terms of reducing runoff and erosion, increasing organic material, improving soil structure and cation exchange capacity, increasing infiltration of rainwater and aquifer recharge—all contributing to maintenance and/or improvement of watershed conditions. The greatest level of acceptance on the part of the participating farm families are: i) no-burn; ii) crop residue (*rastrojo*) management; iii) green barriers of vetiver; iv) live fence posts; v) home gardens; and iv) fruit trees on individual terraces.
5. Water source protection techniques provide low-cost, high-impact solutions for improving rural populations' access to cleaner water.
6. Environmental education can contribute to the overall objectives and enrich the integrity of water resources management when its elements are incorporated as a nexus for all Project component activities.
7. The use of strategic watershed management criteria would improve the selection of priority intervention areas and technologies, and help minimize the incidence of dispersion in the Project's geographic outreach and missed opportunities for integration and synergy.
8. Impact indicators should be carefully selected to measure all important areas of progress. Some deficiencies were noted in the measurement of gains made through FIAES and in the

qualification of watershed conservation. It should be recognized that Activity interventions may change to react to changing conditions and it should be possible to modify impact indicators accordingly.

VII. ANNEXES

ANNEX A

A. FINAL INDICATOR RESULTS 1999 - 2001
2002 - 2005

INDICATOR		LIFE OF PROGRAM TARGETS	FISCAL YEAR			
			FY2002	FY2003	FY2004	FY2005
SO LEVEL: Rural households in target areas with water that meet quality and time standards **(Selected for reporting in the Annual Report)**	**Target**	M: 65% F: 65%	M: 65% F: 65%	M: 70% F: 70%	M: 65% F: 65%	M: 65% F:65%
	Actual	M: 65.4% F:63%	M: 62% F: 55%	M: 64% F: 62%	M: 65% F: 63%	M: 65.4% F:63%
IR LEVEL: Area covered by improved practices: soil conservation/ reforestation, organic cropping, and integrated pest management; hectares, cumulative **(Selected for reporting in the Annual Report)**	**Target**	23,000 4,500 5,500 T= 33,000	14,000 3,000 3,000 T= 20,000	19,750 3,500 4,500 T= 27,750	22,000 4,000 5,000 T= 31,000	23,000 4,500 5,500 T= 33,000
	Actual	20,394 7,399 8,267 T = 36,060	16,303 3,808 5,114 T= 25,225	19,042 3,909 6,219 T= 29,170	20,394 7,399 8,267 T = 36,060	20,394 7,399 8,267 T = 36,060
Rehabilitated, expanded and new systems; cumulative (number of systems and number of beneficiary families) **(New)** **(Selected for reporting in the Annual Report)** R-Rehabilitated systems E-Expanded systems N-New systems T-Total systems/number of beneficiary families	**Target**	32; 10,176 20; 6,360 75; 23,850 T= 127; 40,386	9 20 63 T= 92*	25; 7,950 15, 4,770 69; 21,942 T= 109; 34,662	30; 9,540 18; 5,724 70: 22,260 T= 118; 37,524	32; 10,176 20; 6,360 75; 23,850 T= 127; 40,386
	Actual	R-21; 6,678 E-17; 5,406 N-87; 27,666 T= 125*/ 39,750	R-20; 6,360 E-13; 4,134 N-67; 21,306 T=100*/ 31,810	R-20; 6,678 E-14, 4,452 N-72; 22,896 T= 106/ 34,026	R-21; 6,678 E-17; 5,406 N-83; 26,394 T= 121/ 38,478	R-21; 6,678 E-17; 5,406 N-87; 27,666 T= 125*/ 39,750
Water related changes resulting from citizen group actions, cumulative	**Target**	650	300	500	600	650
	Actual	681	396	413	453	681
Water related ordinances passed; cumulative	**Target**	38	36	30	34	38
	Actual	43	32	33	35	43
Resources invested in water-related projects	**Target**	12%	25%	10%	10%	12%
	Actual	10%	2%	8%	10%	10%
SUB-IR LEVEL: Farm Units utilizing improved practices; cumulative	**Target**	12,500	5,000	11,000	12,000	12,500
	Actual	12,878	9,186	11,249	12,878	12,878
Households benefiting from improved solid-waste management; cumulative	**Target**	14,000	6,535	10,500	13,000	14,000
	Actual	13,159	9,586	9,996	10,296	13,159
Households benefiting from improved wastewater management; cumulative	**Target**	6,500	1,666	5,000	6,000	6,500
	Actual	5,326	4,318	4,708	5,008	5,326
Industries using pollution prevention practices; cumulative**	**Target**	16	8	10	N/A	N/A

	Actual	N/A	6	6	N/A	N/A
INDICATOR		**LIFE OF PROGRAM TARGETS**	A. FISCAL YEAR			
			FY2002	**FY2003**	**FY2004**	**FY2005**
Local organization members and technicians trained; cumulative **(Selected for reporting in the Annual Report)**	**Target**	M: 7,400 F: 4,460 T= 11,860	M: 1,200 F: 1,260 T= 2,460	M: 6,500 F: 3,500 T= 10,000	M: 7,000 F: 4,000 T= 11,000	M: 7,400 F: 4,460 T= 11,860
	Actual	M: 10,254 F: 5,017 T= 15,271	M: 5,770 F: 3,133 T= 8,903	M: 7,447 F: 4,169 T= 11,616	M: 9,492 F: 4,470 T= 13,962	M: 10,254 F: 5,017 T= 15,271
Households that pay the full cost of clean water services	**Target**	30,000	25,000	25,000	27,500	30,000
	Actual	40,068	34,344	21,881	38,796	40,068
Salvadorans knowing at least one cause and at least one consequence of unclean water	**Target**	M: 90-99% F: 90-99%	M: 85% F: 87%	M: 90-99% F: 90-99%	M: 90-99% F: 90-99%	M: 90-99% F: 90-99%
	Actual	M: 99% F: 99%	M: 99% F: 99%	M: 96% F: 93%	M: 99% F: 99%	M: 99% F: 99%
Salvadorans knowing at least one solution for unclean water	**Target**	M: 90-99% F: 90-99%	M: 80% F: 75%	M: 90-99% F: 90-99%	M: 90-99% F: 90-99%	M: 90-99% F: 90-99%
	Actual	M:99% F: 99%	M:97% F: 94%	M: 94% F: 94%	M: 99% F: 99%	M: 99% F: 99%
Organizations working on water-related issues; cumulative	**Target**	275	50	225	250	275
	Actual	311	201	215	241	311
Municipalities with water resource management plans***	**Target**	18	18	18	18	18
	Actual	N/A	18	18	N/A	N/A
Municipalities operating their own water systems; cumulative	**Target**	14	11	12	14	14
	Actual	8	8	8	8	8

***** This number does not include 6 rehabilitated and 2 new water systems implemented by the WE SO that were reported under the Mitch and Earthquake SpOs.

****** WE decided to stop monitoring this indicator due to the lack of support from the industries and a lack of incentives that makes our projections impossible to achieve.

******* This indicator target was reached in 2002

Indicators 1999 – 2001
PERFORMANCE DATA TABLES
INCREASED ACCESS BY RURAL HOUSEHOLDS TO CLEAN WATER

RESULT No. 4: Increased Access by Rural Households to Clean Water

INDICATOR No. 4.1: Rural households in target areas with water that meet quality and time standards.

UNIT OF MEASURE: Percent of households that meet both quality and time standards, per year, by male-and female-headed households (M/F)

SOURCE: Annual Survey

PERSON RESPONSIBLE FOR OBTAINING DATA:

Brad Carr for AGUA activity No. 0443

INDICATOR DESCRIPTION: All households in target areas, whether in municipalities or cantons, are considered rural by SO4. Households must meet both quality and time standards to count as progress against this indicator. Quality is defined as water from piped systems provided that the system has a disinfection component. Water from piped systems is considered to meet time standards if the household receives water every day of the week. Households with non-piped water are defined as meeting the quality standard if water is treated with chlorine by the household. Households with non-piped water meet the time standard if water source is available every day. Non-piped water includes wells and springs.

This indicator measures access as a percentage of total target area population. The target area population, per year is (a 2.1% growth rate is assumed):

1998 – 380,000
1999 – 387,980
2000 – 396,128
2001 – 404,446
2002 – 412,939
2003 – 421,612
2004 – 430,466
2005 – 439,505

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		M:30 F:26
1998 (T)	M:34 F:31	M: 38.0 F: 38.6
1999(T)	M:39 F:37	M: 29 F: 30
2000 (T)	M:46 F:45	M: 40 F: 48
2001 (T)	M:55 F:55	M:51 F:55
2002 (T)	M:65 F:65	M: F:
2003 (T)	M:70 F:70	M: F:
2004 (T)	M:75 F:75	M: F:
2005 (T)	M:78 F:78	M: F:

RESULT No. 4: Increased Access by Rural Households to Clean Water

INDICATOR No. 4.2: Rural households nationally with water that meets quality and time standards*.

UNIT OF MEASURE: Percent of households that meet both time and quality standards, per year, by male-, and female-headed households (M/F)

SOURCE: Multi-Purpose Household Survey, special male/female breakdown provided for(SO1) by the survey team

Sample size: 4,032 households out of approximately 517,000 total households

PERSON RESPONSIBLE FOR OBTAINING DATA:
Elizabeth de Gonzalez

INDICATOR DESCRIPTION: Baseline data count only households with access to piped water (household taps and public taps). These households are defined as meeting both time and quality standards. Households with non-piped water (not included in baseline data but included in targets and actuals) are defined as meeting the quality standard if water is treated with chlorine by the household. Households with non-piped water meet the time standard if water source is available every day.

COMMENTS: See Multi-Purpose Household Survey for the definition of rural at the national level.

YEAR	PLANNED	ACTUAL
1997(B)		M: 41 F: 38
1998 (T)	M: 42 F: 40	M:39 F:39
1999 (T)	M: 45 F: 43	35
2000 (T)	M: 48 F: 47	Not available
2001 (T)	M: 52 F: 52	Not available
2002 (T)	M: 57 F: 57	
2002 (T)	M: 57 F: 57	
2002 (T)	M: 57 F: 57	
2002 (T)	M: 57 F: 57	

* In 2001, the WE office discontinued all reporting on this indicator due to a lack of reporting data.

RESULT No. 4.1: IMPROVED QUALITY OF WATER SOURCES.

INDICATOR No. 4.1.1: Area covered by improved practices

UNIT OF MEASURE: Hectares, cumulative

SOURCE: Contractor and grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Rafael Cuellar for activities (CRECER No, 0397 and ROCA, 0438, Mary de Rodriguez for FIAES, Brad Carr for activity AGUA, No. 0443, Elizabeth de Gonzalez, World Vision and MIRA, No. 0448

INDICATOR DESCRIPTION: Practices include:

1. Soil conservation/reforestation
2. Organic cropping
3. Integrated pest management

COMMENTS: This indicator is measured for the 18 target municipalities.

This indicator is more than three times greater than the 2001 target. This is due primarily to excellent performance by the CARE grantee and the Enterprise for the America's Fund for El Salvador (FIAES).

YEAR	PLANNED	ACTUAL
1997 (B)		1. 4,055 2. 815 3. 811 5,681
1998 (T)	1. 4,100 2. 900 3. 900 5,900	1. 4,423 2. 931 3. 1,047 6,401
1999 (T)	1.4,250 2.1,000 3.1,000 6,250	1. 4,736 2. 1,479 3. 1,206 7,421
2000 (T)	1.4,500 2.1,100 3.1,100 6,700	1. 8,286 2. 2,781 3. 2,341 13,408
2001 (T)	1.4,800 2.1,200 3.1,200 7,200	1.16,394 2. 2,173 3. 3,484 22,051
2002 (T)	1. 5,000 2. 1,300 3. 1,300 7,600	1. 2. 3.
2003 (T)	1. 18,000 2. 2,500 3. 4,300 7,600	1. 2. 3.
2004 (T)	1. 20,000 2. 3,000 3. 5,000 7,600	1. 2. 3.

RESULT No. 4.1.1: INCREASED USE OF IMPROVED AGRICULTURAL/CONSERVATION PRACTICES

INDICATOR No. 4.1.1.1: Farm units utilizing improved practices

UNIT OF MEASURE: Number of households, cumulative.

SOURCE: Contractor and Grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Brad Carr for activity 443, Elizabeth de Gonzalez for World Vision and MIRA, and Rafael Cuellar for activity 438.

INDICATOR DESCRIPTION: Farms using improved agricultural practices, such as: soil conservation, agro forestry, non-burn techniques, organic cropping, water saving, water re-using, etc.

COMMENTS: This indicator measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1999 (B)		2,067
2000 (T)	3,000	4,167
2001 (T)	4,000	6,789
2002 (T)	5,000	
2003 (T)	6,000	
2004 (T)	7,000	
2005 (T)	7,200	

RESULT No. 4.2: IMPROVED PERFORMANCE OF WATER DELIVERY AND WASTE MANAGEMENT SYSTEMS*

INDICATOR No. 4.2.1: Rehabilitated, expanded and new systems

UNIT OF MEASURE: Number of systems and number of beneficiary families, cumulative.

SOURCE: Contractor/grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: José Antonio Ramos for PROSAGUAS activity No. 0320, Patricia Echeverria for SIA and Brad Car for AGUA activity No. 0443.

INDICATOR DESCRIPTION: Improved infrastructure includes:

1. rehabilitated systems
2. expanded systems
3. new systems

COMMENTS: The number of target beneficiary families is calculated by multiplying the target number of systems by 318 families per system. This ratio was obtained from an average of USAID AGUA and PROSAGUAS water systems beneficiary populations.

This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1998 (B)	1. 0 2. 0 3. 3 3	1. 0 2. 3 3. 3 6
1999 (T)	1. 1 2. 4 3. 18 23	1. 4 2. 3 3. 18 25
2000 (T)	1. 3 2. 7 3. 34 44	1. 5 2. 5 3. 36 46
2001 (T)	1. 6 2. 14 3. 49 69	1.20 2.12 3.55 87
2002 (T)	1. 9 2. 20 3. 63 91	1. 2. 3.
2003 (T)	1. 24; 7,632 2. 15; 4,770 3. 60; 19,080 99; 31,482	1. 2. 3.
2004 (T)	1. 30; 9,540 2. 18; 5,724 3. 70; 22,260 118; 37,524	1. 2. 3.
2005 (T)	1. 32; 10,176 2. 20; 6,360 3. 75; 23,850 127; 40,386	1. 2. 3.

* This indicator was changed in 2002 to include reporting for solid and liquid waste treatment systems under this result. This was in accordance with final evaluation recommendations.

RESULT No. 4.2: IMPROVED PERFORMANCE OF WATER DELIVERY AND WASTE MANAGEMENT SYSTEMS*

INDICATOR No.4.2.2: Households benefiting from improved solid-waste management**

UNIT OF MEASURE: Number of households, cumulative.

SOURCE: Contractor and grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Brad Carr for AGUA activity No. 0443 and Ana Luz de Mena for Municipal Development activity No. 0388.

INDICATOR DESCRIPTION: Improved solid-waste management is defined as regularly scheduled garbage collection and disposal of collected garbage at sanitary landfills.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1999 (B)	0	2,994
2000 (T)	4,100	3,214
2001 (T)	5,165	3,459
2002 (T)	6,535	
2003 (T)	9,000	
2004 (T)	10,000	
2005 (T)	10,250	

* This indicator was changed in 2002 to include reporting for solid and liquid waste treatment systems under this result. This was in accordance with final evaluation recommendations.

** This indicator was previously reported under Result 4.1.

RESULT No. 4.2: IMPROVED PERFORMANCE OF WATER DELIVERY AND WASTE MANAGEMENT SYSTEMS*

INDICATOR No.4.2.3: Households benefiting from improved wastewater management**

UNIT OF MEASURE: Number of households, cumulative.

SOURCE: Contractor and grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Brad Carr for AGUA activity No. 0443 and Ana Luz de Mena for Municipal Development activity No. 0388.

INDICATOR DESCRIPTION: Improved wastewater management is defined as households connected to a sewer system with proper sewage treatment operations or on site appropriate treatment.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1999 (B)	0	516
2000 (T)	1070	1,259
2001 (T)	1370	2,768
2002 (T)	1,666	
2003 (T)	3,000	
2004 (T)	3,400	
2005 (T)	3,500	

* This indicator was changed in 2002 to include reporting for solid and liquid waste treatment systems under this result. This was in accordance with final evaluation recommendations.

** This indicator was previously reported under Result 4.1.

RESULT No. 4.2: IMPROVED PERFORMANCE OF WATER DELIVERY AND WASTE MANAGEMENT SYSTEMS*

INDICATOR No.4.2.4: Industries using pollution prevention practices**

UNIT OF MEASURE: Number, cumulative.

SOURCE: Contractor and grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Brad Carr for AGUA activity No. 0443.

INDICATOR DESCRIPTION:

Industries using pollution prevention practices during the production process and/or at discharge point.

COMMENTS: This indicator is measured for the 18 target municipalities. According to the Ministry of Health's office of Environmental Sanitation (1993 data), there were 182 industries in 13 of the 18 municipalities discharging effluents.

WE have decided to stop monitoring this indicator, due to the lack of incentives in the industries to achieve changes in the near future.

YEAR	PLANNED	ACTUAL
1997 (B)		0
1998 (T)	1	1
1999 (T)	2	2
2000 (T)	4	5
2001 (T)	6	6
2002 (T)	8	6
2003 (T)	10	6
2004 (T)	15	STOP
2005 (T)	16	STOP

* This indicator was changed in 2002 to include reporting for solid and liquid waste treatment systems under this result. This was in accordance with final evaluation recommendations.

** This indicator was previously reported under Result 4.1.

RESULT No. 4.2.1 : IMPROVED LOCAL MANAGEMENT AND TECHNICAL HUMAN RESOURCES CAPACITY

INDICATOR No.4.2.1.1: Local organization members and technicians trained

UNIT OF MEASURE: Number, cumulative, male/female

SOURCE: Contractor and grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Brad Carr for AGUA activity No. 0443, Elizabeth de Gonzalez for World Vision.

INDICATOR DESCRIPTION: Number of male/female trainees on different aspects of water management from communities and municipal organizations.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		M:18 F:12 30
1998 (T)	M: 64 F: 56 120	M: 427 F: 343 770
1999 (T)	M: 430 F: 410 740	M: 796 F: 598 1,394
2000 (T)	M: 815 F: 805 1,620	M: 1,857 F: 1,298 3,155
2001 (T)	M: 1,018 F: 1,022 2,040	M: 3,534 F: 1,853 5,387
2002 (T)	M: 1,200 F: 1,260 2,460	
2003 (T)	M: 1,500 F: 1,500 3,000	
2004 (T)	M: 2,000 F: 2,060 4,060	
2005 (T)	M: 2,400 F: 2,460 4,860	

RESULT No. 4.2.1: IMPROVED LOCAL MANAGEMENT AND TECHNICAL HUMAN RESOURCES CAPACITY

INDICATOR No.4.2.1.2: Households that pay the full cost of clean water services

UNIT OF MEASURE: Number of households, cumulative.

SOURCE: Contractor and grantee reports

PERSON RESPONSIBLE FOR OBTAINING DATA: Brad Carr for AGUA activity No. 0443, Jose Ramos for PROSAGUAS activity No. 320, Patricia Echeverria for SIA.

INDICATOR DESCRIPTION: This indicator counts the cumulative number of households that are paying the full (unsubsidized) cost of clean water service.

COMMENTS: This indicator is measured for the 18 target municipalities.

It replaces the current Indicator No. 4.2.2.2 "Water system costs covered by collected fees"

The Water SO considers that counting the number of households served is a more realistic indicator of financial sustainability than counting the number of systems because the size of systems is highly variable.

YEAR	PLANNED	ACTUAL
1997 (B)		1,500
1998 (T)	6,000	1,500
1999 (T)	10,000	1,500
2000 (T)	20,000	22,161
2001 (T)	30,000	27,666
2002 (T)	40,000	
2003 (T)	48,000	
2004 (T)	57,500	
2005 (T)	66,800	

RESULT No. 4.3: More Effective Citizen Actions to Address Water Issues

INDICATOR No. 4.3.1: Water-related changes resulting from citizen-group actions

UNIT OF MEASURE: Number of changes, cumulative.

SOURCE: Activity No. 519-0388 reports for the 11 municipalities under the municipal-development activity and the CARE annual Diagnostic reports for the 18 municipalities.

PERSON RESPONSIBLE FOR OBTAINING DATA:

Brad Carr for AGUA activity No. 0443, and Ana Luz de Mena for Municipal Participation activity No. 0388.

INDICATOR DESCRIPTION: Changes made as a direct result of citizen group efforts to resolve water issues include, but are not limited to: formation of pro-water groups (NGOs); technical and/or financial support obtained by water groups; creation, expansion and/or rehabilitation of delivery systems; pollution prevention; conflict resolution; and other pro-clean water actions.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		43
1998 (T)	60	127
1999 (T)	120	190
2000 (T)	180	198
2001 (T)	240	407
2002 (T)	300	
2003 (T)	500	
2004 (T)	600	
2005 (T)	650	

RESULT No. 4.3.1.: INCREASED UNDERSTANDING OF CAUSES AND CONSEQUENCES OF UNCLEAN WATER

INDICATOR No.4.3.1.1: Salvadorans knowing at least one cause and at least one consequence of unclean water

UNIT OF MEASURE: percent, male/female

SOURCE: Annual CARE diagnostics

PERSON RESPONSIBLE FOR OBTAINING DATA:
Brad Carr for AGUA activity No. 0443

INDICATOR DESCRIPTION:

Citizens that can mention at least one cause and at least one consequence, and up to three, of unclean water when asked any time.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		M: 15 F: 17 16
1998 (T)	M: 20 F: 22 21	M: 91 F: 92 92
1999 (T)	M: 30 F: 32 31	M: 65 F: 28 47
2000 (T)	M: 45 F: 47 46	M:89 F: 88 89
2001 (T)	M: 65 F: 67 66	M: 99 F: 99 99
2002 (T)	M: 85 F: 87 86	
2003 (T)	M: 95 F: 95 95	
2004 (T)	M: 95 F: 95 95	
2005 (T)	M: 95 F: 95 95	

RESULT No. 4.3.2 INCREASED UNDERSTANDING OF SOLUTIONS FOR UNCLEAN WATER

INDICATOR No. 4.3.2.1: Salvadorans knowing at least one solution for unclean water

UNIT OF MEASURE: percent, cumulative, male/female

SOURCE: Annual CARE Diagnostics.

~~PERSON RESPONSIBLE FOR OBTAINING DATA:~~

Brad Carr for AGUA activity No. 0443

INDICATOR DESCRIPTION:

Citizens that can mention at least one solution but up to three, for unclean water when asked any time.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		M: 34 F: 32 33
1998 (T)	M:39 F: 37 38	M: 94 F: 95 95
1999 (T)	M:50 F: 45 48	M: 64 F: 27 46
2000 (T)	M:60 F: 55 58	M: 90 F: 83 87
2001 (T)	M:75 F: 70 73	M: 97 F: 94 96
2002 (T)	M:80 F: 75 78	
2003 (T)	M: 95 F: 95 95	
2004 (T)	M: 95 F: 95 95	
2005 (T)	M: 95 F: 95 95	

RESULT No. 4.3.3: COMMUNITIES MORE ORGANIZED AROUND WATER ISSUES

INDICATOR No. 4.3.3.1 : Organizations working on water-related issues

UNIT OF MEASURE: Number, cumulative.

SOURCE: Annual CARE Diagnostics

PERSON RESPONSIBLE FOR OBTAINING DATA:
Brad Carr for AGUA activity No. 0443

INDICATOR DESCRIPTION:
ADESCOS and local groups working on water projects execution and all types of water protection initiatives.

COMMENTS: This indicator will be measured only for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		26
1998 (T)	30	53
1999 (T)	35	152
2000 (T)	40	132
2001 (T)	45	200
2002 (T)	50	
2003 (T)	200	
2004 (T)	250	
2005 (T)	275	

RESULT No. 4.4: Improved Municipal Management of Water Resources

INDICATOR No. 4.4.1: Water-related ordinances passed

UNIT OF MEASURE: Number of ordinances, cumulative.

SOURCE: Annual CARE Diagnostics
PERSON RESPONSIBLE FOR OBTAINING DATA:
Brad Carr for AGUA activity No. 0443, and Ana Luz de Mena for activity No. 0388

INDICATOR DESCRIPTION: Ordinances might include, but are not limited to: water-delivery systems, solid-waste disposal, wastewater treatment, pollution prevention, watershed management, water purification.

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		0
1998 (T)	6	2
1999 (T)	18	5
2000 (T)	24	9
2001 (T)	30	17
2002 (T)	36	
2003 (T)	30	
2004 (T)	34	
2005 (T)	38	

RESULT No. 4.4: Improved Municipal Management of Water Resources

INDICATOR No. 4.4.2: Resources invested in water-related projects

UNIT OF MEASURE: Percentage of municipal resources spent on water-related activities, per year.

SOURCE: Activity No. 519-0443 under the CARE annual diagnostics for the 18 municipalities.

PERSON RESPONSIBLE FOR OBTAINING DATA:
Brad Carr for AGUA activity No. 0443

INDICATOR DESCRIPTION: The data reported represent the percent of the sum of all resources for the 18 municipalities. WE records, however, track percentages for individual municipalities as well. Projects might include, but are not limited to: water-delivery systems, solid-waste disposal, wastewater treatment, pollution prevention, watershed management, water purification

COMMENTS: The data is reported from the AGUA 18 Municipalities.
The percentage for 2004 and 2005 has been lowered. We don't expect that in the next years the trend is going to change.

YEAR	PLANNED	ACTUAL
1997 (B)		Not available
1998 (T)	5	5.55
1999 (T)	10	10
2000 (T)	15	12
2001 (T)	20	5
2002 (T)	25	2
2003 (T)	10	8
2004 (T)	10	
2005 (T)	12	

RESULT No. 4.4: IMPROVED MUNICIPAL MANAGEMENT OF WATER RESOURCES

INDICATOR No. 4.4.3: Municipalities with water-resource management plans

UNIT OF MEASURE: Number, cumulative.

SOURCE: Contractor and grantee reports

~~PERSON RESPONSIBLE FOR OBTAINING DATA:~~
Brad Carr for AGUA activity No. 0443.

INDICATOR DESCRIPTION: A formal plan and a budget with water source protection, contamination prevention, and water resources conservation activities.

COMMENTS: This indicator is measured for the 18 target municipalities. WE continue to measure all the 18 municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)	0	0
1998 (T)	6	0
1999 (T)	8	9
2000 (T)	12	10
2001 (T)	15	17
2002 (T)	18	18
2003 (T)	18	18
2004 (T)	18	
2005 (T)	18	

RESULT No. 4.4.1 : NATIONAL WATER POLICY/LEGISLATION SUPPORTS MUNICIPALITIES

INDICATOR No.4.4..1 : Municipalities operating their own water systems

UNIT OF MEASURE: Number of water systems, cumulative

SOURCE: Contractor and grantee report

PERSON RESPONSIBLE FOR OBTAINING DATA:
Brad Carr for AGUA activity No. 0443.

INDICATOR DESCRIPTION: Number of municipalities that are operating their own water systems

COMMENTS: This indicator is measured for the 18 target municipalities.

YEAR	PLANNED	ACTUAL
1997 (B)		1
1998 (T)	2	2
1999 (T)	8	8
2000 (T)	9	8
2001 (T)	10	8
2002 (T)	11	8
2003 (T)	12	8
2004 (T)	14	
2005 (T)	14	

ANNEX B

B. **LIST OF EVALUATIONS, ASSESSMENTS AND SPECIAL STUDIES CONDUCTED DURING THE LIFE OF THE SO**

- Associates in Rural Development AGUA; Final Report of the Evaluation; October 2002
- CARE Consortium Final Project Report; June 2005
- Project Concern International Final Report; June 2005
- ICCA CAMAGRO Final Report;
- CATHOLIC RELIEF SERVCIES Final Report;
- WORLD VISION Final Report;
- BORDER DEVELOPMENT SERVICES Final Report; September 2002
- CHEMONICS SWDSU Final Report; August 2005
- Hagler Bailly Services, Inc, Waste Water Workshop Final Report; July 2000
- EHP/CDM Water Policy Final Report; October 2002
- FUSADES Water Quality in Rural Households Report; August 2001
- CARE El Salvador; Environmental Impact Assessment for SWDSU Sites; September 2004
- CATIE, Identification of Salvadoran Watersheds with High Economic Potential; January 2005

ANNEX C

C. LIST OF INSTRUMENTS THAT HAVE BEEN CLOSED OUT PER ADS 202.3.10.1

- ICCA-CAMAGRO – **closed on 03/01/05**
  Cooperative Agreement No. 519-A-00-00-00070-00
  Award: $ 391,050; Watershed Management Farm Incentives
  Cost Sharing: $159,635

- Camp Dresser & McKee, International, Inc – **closed on 01/13/05**
  Contract HRN-I-00-99-00011-00, Task Order #801
  Award: $247,057; Water Policy Initiatives

- CATIE – **closed on 04/24/06**
  Contract No.519-O-005-00012-00
  Award: $24,533; Watershed Study

Close out in process:

- Project Concern International; Cooperative Agreement #519-A-00-00-00066-00
  Award: $1,430,731
  Cost Sharing: $563,819
- World Vision Inc., Cooperative Agreement #519-A-00-99-00210-00
  Award: $398,257
  Cost Sharing: $200,000
- Border Development Services; Cooperative Agreement #519-A-00-00-00064-00
  Award: $43,940; Decentralized Sewage Treatment Plant
- Hagler Bailly Services, Inc; Contract LAG-I-00-99-00019-00, Task Order #801
  Award: $77,205; Appropriate Waste Water Treatment Workshop
- Associates in Rural Development; Contract #LAG-1-00-98-00018-00, Task Order #805
  Award: $109,922; Mid Term Evaluation

Close out pending:

- Chemonics International, Inc.; Contract #PCE-I-00-99-00003-00, Task Order #823
  Award: $632,945; Reservoir Implementation Project
- CARE El Salvador; Cooperative Agreement #519-A-00-99-00084-00
  Award: $17,682,685; Access, Management, and Rational Use of Water
  Cost Sharing: $6.64 million
- Catholic Relief Services; Cooperative Agreement #519-A-00-00-00067-00
  Award: $348,463
  Cost Sharing: $251,525
- FUSADES; Contract # 519-C-00-00-00023-00; Add-on to existing EGE contract
  Amount: $150,000
- CARE El Salvador; Contract #519-O-00-04-00070-00
  Award: $52,132; Reservoirs EIA

ANNEX D

D. NAMES AND CONTACT POINT OF INDIVIDUALS DIRECTLY INVOLVED IN THE PLANNING, ACHIEVING, ASSESSING AND LEARNING OF THE SO

- Brad Carr, USAID El Salvador; 2234-1360
- Mary de Rodríguez, USAID El Salvador; 2234-1364
- Patty Echeverria, USAID El Salvador; 2234-1382
- Rafael Cuellar, USAID El Salvador; 2234-1309
- Norma Velásquez Castro, USAID El Salvador; 2234-1471
- William Patterson, USAID; wpatterson@usaid.gov
- Roney Gutierrez, 2264-0380
- Juan Marco Alvarez, Salvanatura; 2269-1515
- Cecilia Gomez, Fundamuni; 2223-6403
- Guillermo Galvan, SACDEL; 2269-1515
- John McPhail, Project Concern International; 2298-6137
- Richard Jones, Catholic Relief Services; 2298-1688
- Carlos Gomez, World Vision; 2260-0565
- Modesto Juarez, CATIE; 2261-2036

ANNEX E

E. PRINCIPAL GRANTEE FINAL REPORTS – EXECUTIVE SUMMARIES

CARE – EL SALVADOR

1. EXECUTIVE SUMMARY

This Final Report summarizes AGUA activities implemented by the CARE-SalvaNATURA-FUNDAMUNI-SACDEL-World Vision Consortium from June 1999 to March 2005. After more than 5 years of working with hundreds of poor communities in rural areas of El Salvador, the CARE Consortium helped thousands of families improve their access to clean water. More importantly, today these communities have the capacity to lead their own growth and development in areas such as watershed planning, resource conservation, and water management.

A noteworthy achievement of AGUA has been the capacity-building program for 18 municipalities benefiting 18 municipal councils and development committees. During its first phase, AGUA formed six sub-watershed organizations, which represented at the time an innovative approach to water management in El Salvador. During phase II, micro-watershed planning was emphasized, and consequently, 14 micro-watershed management committees were formed and trained. Of these, 3 committees are now legalized as non-profit associations, and another 7 have the legal backing of their Local Development Committees. In addition, AGUA facilitated the approval of 43 municipal ordinances with the full participation local governments.

AGUA utilized the "Farmer to Farmer" Extension Methodology. Training was provided on farm planning to demonstration farmers who transferred their knowledge to neighboring farmers. Using this strategy, AGUA reached 6,832 farms. As a result, soil conservation practices were implemented on 13,296 hectares, plus organic agriculture practices on 5,503 hectares, and integrated pest management on 5,095 hectares. Eighteen local Economic Development Projects were implemented related to agriculture production (irrigation horticulture, fish hatcheries, animal production, seed and fruit processing, ecotourism projects). The five-ecotourism projects have been very successful in providing new economic opportunities for rural families.

AGUA provided technical assistance and directly invested in the construction, expansion, and/or rehabilitation of 97 systems; large economic counterparts were attained from communities, municipalities, central government organizations, and non-governmental organizations. In all, AGUA improved potable water service to 26,510 families. In addition, legal assistance was provided for the training and legalization of 33 water boards. A Network of Water Boards in the Department of Ahuachapan was created – the first of its kind in El Salvador. This Network obtained legal status as an Association of Water Boards through the Ministry of the Interior.

A small-decentralized wastewater treatment project was implemented in the municipality of San Francisco Menéndez as a pilot project with the option of re-using treated water. A centralized wastewater treatment system was also constructed in San Francisco Menéndez (600 families). This system complemented the potable water project implemented during AGUA I, and in turn became an integrated water and sanitation project, completely administered by the town water board. In total, AGUA implemented 15 liquid waste management systems to the benefit of 3,060 families. In addition, 10 solid waste management systems were implemented that benefited 6,873 families.

2. LOCAL GOVERNMENTS AND COMMUNITIES APPLYING INTEGRATED WATER RESOURCES MANAGEMENT

Community Environmental Education Festival; El Borbollón Watershed, Usulutan

A. INTRODUCTION

The principle objective of this component has been to improve the capacities of local organizations in water management. The main protagonists have been local governments, community organizations, and local representatives of national agencies.

Phase I:

During Phase I of AGUA Activity, work was conducted in 18 municipalities, beginning with a diagnostic process followed by the implementation of a capacity-building program. Fundamental to this process was the formation and training of 18 Municipal Development Committees. Some of these groups previously existed, but had a relatively weak presence in their municipality.

Six sub-watershed organizations were formed, which represented at the time an innovative approach to water management in El Salvador. This approach demonstrated that it was possible to generate understanding al the local level on the principles of good water resource management.

Important results of AGUA I, were 18 Municipal Development Plans, and 4 sub watershed management plans. In addition, 31 municipal environmental ordinances were approved and published in the 'Diario Oficial', with the full participation local government representatives.

Phase II:

During AGUA Phase II the watershed approach evolved into an implementation model focused at the micro-watershed level. This approach presented to local actors a more accessible management scheme that facilitated the provision of technical assistance and the educational process.

The 14 micro-watersheds prioritized were selected based on technical, socio-economic and environmental criteria. Respective watershed management committees were formed and trained; these soon elaborated micro watershed management plans. Of the 14 micro watershed organizations presently functioning, three committees are legalized as non-profit associations, and another seven are integrated with their Local Development Committees, allowing them to manage project funding.

Other important achievements of AGUA Phase II are the legalization of 10 Local Development Committees and the approval of 12 Environmental Ordinances by municipal governments. These ordinances were presented publicly to communities as an environmental education opportunity. Technical assistance was provided to municipalities for the creation of seven environmental units that were integrated into local government structures and supported with personnel and resources financed by municipalities. These Environmental Units were legalized as part of the National Environmental System, SINAMA. In addition, support was provided for the formation of the Environmental Unit of the Southern Micro Region of Ahuachapán.

Above and beyond the numbers, these achievements reflect the important role that local leaders have assumed in leading the management of their water resources through a public participatory process.

CONCLUSIONS

1. The proposed strategy and methodology employed for working with the watershed approach allowed for the knowledge and empowerment of the local actors on the topic. It was fundamental for the increasing water management principles within communities.

2. The rural participatory diagnostics process as the beginning of AGUA allowed staff to understand the existing political administrative organization of municipalities, cantons and caseríos. This was necessary in order to make relative the watershed environmental education process.

3. The promotion of Municipal Development Plans promoted the awareness and involvement of the population at all levels of decision-making and negotiations in order to resolve their problems, which is key for sustainable local development.

4. The integration of Municipal Development Plans with watershed management plans increased the sustainability of local water management systems, and increased the conservation of natural resources for present and future generations.

5. The creation and strengthening of the Local Development Committees generated permanent democratic mechanisms for public participation. These have assumed the role of analyzing, discussing, reconciling, and decision-making as a function of local development for the entire municipality thus promoting good governance and allowing for more effective citizen participation on topics related to water resources and the management of micro watersheds.

6. The coordination and establishment of agreements among Institutions, Organizations, Municipal Governments, and local organizations for the implementation of local development projects contributes to resource efficiency and reaches a greater portion of the population.

7. With the elaboration and approval of the Municipal Environmental Ordinances, conditions have been created for the governability of water. This process allows for the elaboration of proposals and changes in the local legislation, which in the future, will lead to advocacy in the policies and laws related to water resources.

The formation and training of local actors as a basis for carrying out the activities of AGUA contributed to the strengthening of the most sustainable processes in the municipalities in terms of local development. Since the increased capacities and abilities of these local actors favors self-esteem and contributes to better conditions for conducting their work.

3. POPULATIONS AND MUNICIPALITIES CONSERVING AND SUSTAINABLY USING WATER AND SOIL RESOURCES

Harvesting Shrimp and Tilapia at Chaguantique Reservoir

A. INTRODUCTION

The objectives of this component were the promotion of sustainable agriculture and local economic development initiatives that contribute to environmental conservation. These activities were implemented within sub/micro watersheds. The project targeted “small producers” in sub/micro watersheds with less than 3 hectares.

Phase I:

During AGUA Phase I, AGUA utilized the "Farmer to Farmer" Extension Methodology. Farm planning was conducted with 290 men and 96 women who functioned as demonstration farmers who were selected based on leadership criteria established by the consortium's technical team. These trained demonstration farmers transferred their knowledge to neighboring farmers, which increased the total number of farm plans to over 5,000. As a result, soil conservation practices were implemented on 5,874 hectares, plus organic agriculture practices on 682 hectares, and integrated pest management on 2,667 hectares.

Incentives for conservation work were provided through the delivery of plant material to all Demonstration and Neighboring Farmers. Special incentives were also provided to Demonstration Farmers for their promotional work. The extension methodology made it possible for farmers to develop into recognized community leaders.

Water source protection work focused on sixteen projects implemented to the benefit of 6,519 families. These involved small investments that improved access and quality of surface water sources, such as springs. Environmental education programs were utilized so increase community awareness of the importance of water resource protection.

During AGUA I, an ecotourism project began in the Natural Protected Area of Chaguantique, Jiquilisco, with the protection of a natural spring, which later on became useful for raising tilapia and shrimp. This provided families of the area supplementary income.

Phase II:

During AGUA phase II, the Farmer-to-Farmer Extension Methodology continued to be utilized with success. As a result, 1,583 new farm plans were prepared, and soil conservation practices were implemented on 1,893 hectares, plus organic agriculture on 112 hectares, and integrated pest management on 494 hectares.

By project's end, AGUA reached 6,832 farms. Consequently, soil conservation practices were implemented on 13,296 hectares, plus organic agriculture practices on 5,503 hectares, and integrated pest management on 5,095 hectares.

Another important achievement was the legal constitution of an association of 360 vegetable producers in the municipality of San Pedro Puxtla, Ahuachapán, and an association of ranchers in the municipality of Corinto, Morazán.

Eighteen local Economic Development Projects were implemented related to agriculture production (irrigation horticulture, fish hatcheries, animal production, seed and fruit processing, ecotourism projects). The 102 men and 174 women involved in managing these projects have seen an increase in their family income. The implementation of 5 ecotourism projects has provided new economic opportunities for rural families.

The increased hope of families participating in the crop diversification of farms, the adoption of conservation practices, and local economic initiatives is very evident. These activities constitute replicable models that improve the living conditions of rural families.

CONCLUSIONS

- Working with a micro watershed integrated management approach facilitates the coordination and the implementation of activities between local actors that carry out natural resource conservation and protection actions.

- The Farmer-to-Farmer Extension Model implemented by AGUA has facilitated the transference of knowledge between demonstration farmers and neighboring farmers generating a higher level of group organization and strengthening, demonstrating rapid, visible results in the protection of farms and natural resources. In addition, it has facilitated the formation of associations where the producers are developing the capacity to commercialize their products in a more effective manner.

- Providing plant material for the producers for the implementation of the conservation work on their parcels assured that the producers with scarce economic resources would have the necessary supplies to implement these practices, thereby achieving short-term results that would allow them to visualize the advantages of the conservation works and to motivate them to continue.

- The diversification process on the agricultural parcels of the farmers has improved the diet of the beneficiary families, as well as generating income and self-employment, thus improving the quality of life of the producers.

- The economic development projects were focused on crop diversification and the development of productive systems identified in Farm Plans and Local Economic Development Initiatives plans. These were successful activities when accompanied with commercialization information and organizational training that supported the productive chain.

- The local economic development initiatives have served as an alternative source of economic income for the families involved, in addition to being a source of employment and additional food available to the community.

- Water source protection in the communities allowed them to unite in the effort to protect the sources and provide the basic maintenance necessary, in addition to making higher quality and a greater quantity of water available to the families.

The micro watershed management approach applied by the AGUA Activity was predominantly directed at contributing to the sustainability of natural resources, in which water is the key resource and the actions were a function of the demands of the local actors (producers and rural families).

4. POTABLE WATER SYSTEMS AND WASTE MANAGEMENT

Waste Composting Training,
La Cruzadilla de San Juan, Jiquilisco

A. INTRODUCTION

The principle objective of this component has been the improvement of local capacities and public participation for the sustainable management of potable water systems, and solid & liquid waste management systems.

Phase I:

During AGUA phase I, a Rapid Response program was implemented to meet local demands for better water and sanitation services. Emphasis was placed on strengthening the capacity of communities to manage their systems. Diagnostics were conducted and training was held for 7 administrative boards of systems constructed by other organizations. In addition, 10 new boards were created for water systems constructed by AGUA. In total, 17 water boards were trained and received technical assistance for the constitution of their legal status.

Technical assistance was provided and AGUA directly invested in the construction, expansion, and/or rehabilitation of 45 systems; large economic counterparts were attained from municipalities, governmental organizations, and non-governmental organizations.

With respect to environmental sanitation, 6 projects involving household gray water absorption pits were constructed in different communities. A small-decentralized wastewater treatment project was implemented in the municipality of San Francisco Menéndez as a pilot project with the option of re-using treated water. An important economic counterpart was also negotiated with FISDL for the construction of a sewer system and a wastewater treatment plant for a community of 600 families, which would be eventually implemented during AGUA Phase II.

With respect to solid waste management, 6 community compost projects were implemented, and work was completed in partnership with PCI for two sanitary landfills in the municipalities of San Francisco Menéndez and Corinto.

With the purpose of promoting the sustainability of rural water systems and the decentralization of process, a project was begun for the Association of Water Boards in the Department of Ahuachapan. This Network had the interest of 25 boards from 4 municipalities in South Ahuachapán and one in Sonsonate, as a support mechanism for water boards to access technical assistance for the maintenance and operation of their water and sanitation systems.

Payment for Environmental Services systems were set up for the promotion of environmental conservation in various communities with potable water systems. A portion of the monthly tariffs of these systems was set aside for the protection of the watershed and recharge areas.

Phase II:

During AGUA phase II, 18 potable water system designs were prepared and 52 systems were constructed, rehabilitated and/or expanded. In the effort to increase the capacity of new and existing water boards, technical assistance was provided for the training and legalization of 33 water boards.

In the area of sanitation, a wastewater treatment system was designed and constructed in the Caserío Puente Arce (600 families) in the municipality of San Francisco Menéndez. A strong counterpart from FISDL was received for the construction of the sanitary sewer system. This system complemented the potable water project implemented during AGUA I, and in turn became an integrated water and sanitation project, completely administered by the town water board. With respect to solid wastes, a design was prepared for a composting center and 3 integrated solid waste management projects were implemented, two of which are complementary to AGUA ecotourism projects.

Technical assistance continued for the Network of Water Boards composed of 19 Boards in South Ahuachapán. This Network obtained legal status as an Association of Water Boards through the Ministry of the Interior. A similar process was initiated in the department of Usulután for the formation of 2 new administrative board Networks, one of which has already obtained legal status through a municipal ordinance.

These results demonstrate that increasing local capacities for the management of potable water and sanitation systems translates into an increase in the local governance of water. It also contributes significantly to the decentralization of potable water services by offering local replicable models that are socially, economically and environmentally sustainable.

CONCLUSIONS

- The support provided by the Municipalities for the legalization of the Administrative Boards of Potable Water Systems has been a major factor in their sustainability.

- The construction, operation, maintenance, and administration of sustainable potable water systems and water treatment plants can only be achieved with training and constant, timely assistance for the people responsible for administering those systems.

- Those who administer potable water systems in the rural area must be aware of the need to protect their local watersheds, principally in the water table recharge zones from which supply their water systems.

- The formation, training, and legalization of the administrative boards of potable water systems, plus the involvement of all the beneficiaries in carrying out these works are fundamental for guaranteeing sustainability.

- Every new potable water introduction project should contemplate the need for micro-meters for each household connection; this should be a non-negotiable condition.

- The construction of potable water systems should be accompanied by environmental sanitation projects, such as the construction of latrines and absorption wells.

- Families in rural areas are not accustomed to paying for sewer service or treatment of wastewater; feasibility studies should evaluate the willingness of the community to pay for this service and to sign a contract of acceptance.

- The Statutes, Internal Regulations and Labor Regulations of each board that administers a potable water system or a wastewater treatment plant should be shared with the users of the service.

- The Administrative boards of the potable water systems or the wastewater treatment plants should consider including in their service fee a Fee for Environmental Services to contribute to the water resources of their Micro watershed.

PROJECT CONCERN INTERNATIONAL (PCI)

1. EXECUTIVE SUMMARY:

USAID's Cooperative Agreement No 519-00-00-00066-00, implemented by Project Concern International (PCI), has contributed to achieving the Strategic Objective of "Increased Access to Clean Water" by increasing the availability of and access to clean water and contributing to improved quality of life for over 54,660 Salvadorans. This project has been implemented in two progressive phases between USAID and PCI from July 24, 2001 to September 30, 2002 and its extension through March 31, 2005. Interventions have positively impacted 45 communities in 14 sub-watersheds in the Departments of Ahuachapán, Usulután, Cuscatlán and Morazán in El Salvador. USAID has contributed $1,430,731 over a four-year period, and PCI has provided counterpart contributions in the amount of $563,819.03.

PCI carried out this project in partnership with the AGUA consortium. During implementation, PCI ensured that the AGUA project contributed to the objectives of three areas prioritized by USAID's Water and Environment Program in El Salvador: "Improved Quality of Water Sources", "More Effective Citizen Actions to Address Water Issues", and "Improved Municipal Management of Water Resources". PCI has created technologically advanced and successfully implemented waste management programs for watershed

protection and has developed innovative and environmentally appropriate opportunities for increased production and economic diversification in fragile ecosystems of the target watersheds.

Highlights of PCI's contributions to USAID's water and environment strategy include:

- Increased use of improved waste management practices with households benefiting from improved solid and wastewater management;
- More effective citizen actions to address water issues including water-related changes resulting from citizen action groups;
- Increased citizen understanding of causes and consequences of and solutions for unclean water; and Improved community organization and municipal management of water resources, including increased resources invested in water and development of water management plans.

PCI established strong working partnerships with a number of key stakeholders in the implementation of this project. Partners included the target communities, AGUA Consortium, local municipal governments, national governmental agencies, local NGOs, PVO´S such as FINTRAC, national media, the National Water and Sanitation Network (RASES), the national children's museum and corporate members of the recycling industry. These partnerships and the synergistic effects of the collaborative efforts of PCI significantly contributed to the achievement of project results, and led to increased availability of clean water and the elimination water contamination sources in target municipalities.

A brief description of lower level results and the activities achieved under both periods is provided below.

Intermediate Objective 1.1. Increased use of improved agricultural conservation practices

During Phase I of the AGUA project, PCI provided technical assistance and training in environmentally appropriate agriculture production and marketing which resulted in improved productivity and earnings for 1,902 farm families in 14 communities in the prioritized sub-watersheds of the department of Usulután. Key outcomes of this component include:

- Enhanced agro forestry systems, agricultural techniques and soil conservation practices
- Implementation of conservation/mitigation structures for landslide prevention
- Improved income potential for farm families through training and in-kind assistance

Intermediate Objective 1.2. Increased use of improved waste management practices;

PCI provided technical assistance and funding for the design, development, and implementation of waste management projects in three municipalities benefiting over 28,000 people. In each municipality, PCI helped to improve and scale-up local waste management initiatives through the promotion of increased citizen participation and the identification and training of key actors to support local organization for waste management. Project AGUA's waste management interventions implemented by PCI are currently regarded by the Salvadoran Ministry of Environment as the most successful, appropriate and advanced waste treatment in El Salvador and are employed as models for replication nationally and throughout the region. Outcomes include:

- Design and construction of Waste Water Treatment for the urban population of the municipality of Suchitoto, Department of Cuscatlán, benefiting a target population of 10,000.

- Design and implementation of Sanitary Landfill and Solid Waste Treatment in the municipality of San F. Menéndez, Department of Ahuachapán, benefiting a target population of 14,000.
- Design and implementation of Sanitary Landfill and Solid Waste Treatment in the municipality of Corinto, Department of Morazán , benefiting 4,000.

The second phase of the AGUA Project builds on Phase I efforts and achievements, complementing Project AGUA partner activities in the watershed to maximize project resources. Its impact, transcended the proposed geographical area, has increased public awareness of waste management to a national level and has encouraged project replication in other areas. A noteworthy result of PCI interventions was the increased empowerment of local and municipal governments, and increased citizen, institutional and private sector responsibility for waste management. Phase II consisted of the following two components- the Living Classroom and Education and Technology Transfer.

Intermediate Objective 2.1 Improved solid waste and waste water treatment systems functioning as learning models - The Living Classroom:

The "Living Classroom" methodological approach led to enhanced sustainability of the four waste management projects implemented in AGUA Phase I and provided models for sustainability for Phase II interventions and other waste treatment initiatives throughout El Salvador and the Central American Region.

Principle outcomes of the living classroom component include:

- 4261 tons of solid wastes adequately managed annually
- 440,000 M^3 of waste waters treated annually
- 4 waste management systems administrated and operated by local entities and functioning as learning models
- 1180 local volunteers and leaders trained in solid waste and waste water management

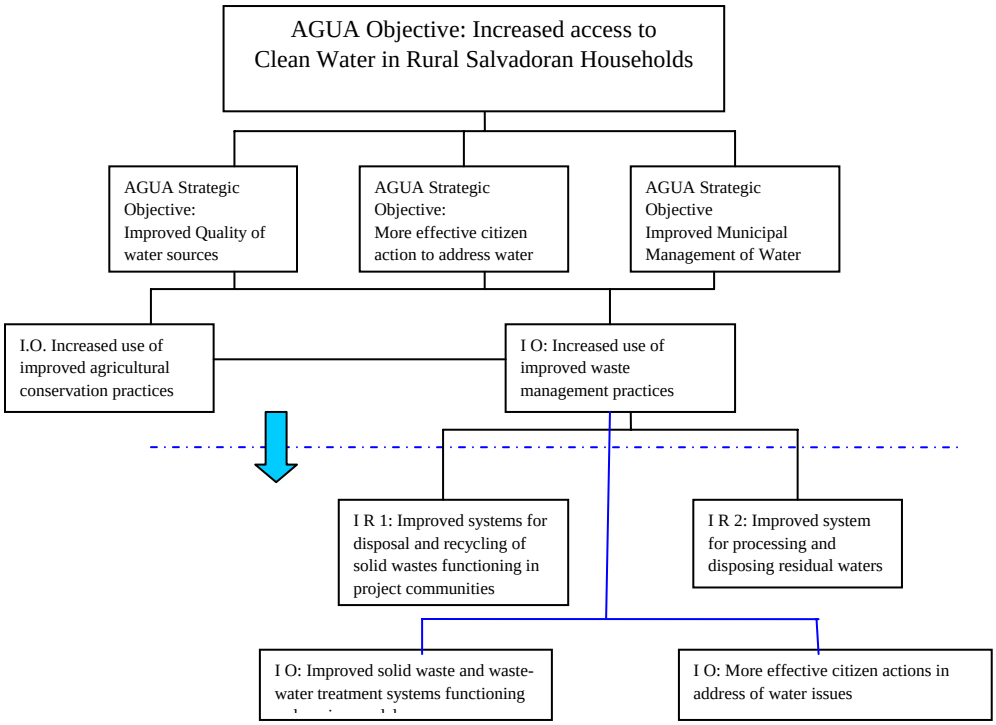
Intermediate Objective 2.2. More Effective Citizen Actions to Address Water Issues
-Waste Management Education and Transference of Technology

This component increased public understanding of the importance of waste management and the transfer of waste management technologies in priority project areas, catalyzing change in public opinion and interest regarding waste management. Consequently this led to definitive improvements in the level of citizen participation and municipal investment in waste treatment. Public response has encouraged PCI and key partners to continue public awareness activities. Overarching outcomes of this component include:

- More than 200,000 people with increased awareness of the importance of adequate waste management systems to reduce water source contamination
- 20 waste management pre-feasibility and 10 feasibility studies realized
- 6 final designs for waste management systems developed
- 2 pilot waste water systems for municipal slaughterhouses implemented

The following diagram describes PCI's project framework contributing to the AGUA Project, as well as the progressive evolution between phases I and II of the project.

Diagram's project



Through design and implementation of the AGUA Project, PCI and partners have improved the quality of life of 54,660 Salvadorans, increasing access to clean water while simultaneously strengthening local capacity to manage water treatment and disposal systems. PCI played a critical role in promoting citizen involvement and municipal ownership of all aspects of the project.