

PROJECT EVALUATION SUMMARY (PES) - PART I

1. PROJECT TITLE CARE/HACHO Potable Water II		2. PROJECT NUMBER 521-0112	3. MISSION/AID/W OFFICE USAID/Haiti
		4. EVALUATION NUMBER: Enter the number maintained by the reporting unit, e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No., beginning with No. 1 each FY. 521-80-6	
		<input checked="" type="checkbox"/> REGULAR EVALUATION <input type="checkbox"/> SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING A. Total \$ _____ B. U.S. \$ 101,000	7. PERIOD COVERED BY EVALUATION	
A. First PRO-AG or Equivalent FY _____	B. Final Obligation Expected FY _____	C. Final Input Delivery FY _____		From (month/yr.) 8/78	To (month/yr.) 5/80
				Date of Evaluation Review _____	

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
Review and approve the request for extension of Phase II activities through December 1980.	Project Committee	June 1980
Review and approve the proposal for a continuation of potable water development in the Ennery/St. Michel de l'Attalaye/Dessaline area. (Phase III)	Project Committee	November 1980

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS

<input type="checkbox"/> Project Paper	<input type="checkbox"/> Implementation Plan e.g., CPI Network	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Financial Plan	<input type="checkbox"/> PIO/T	_____
<input type="checkbox"/> Logical Framework	<input type="checkbox"/> PIO/C	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Project Agreement	<input type="checkbox"/> PIO/P	_____

10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT

A. <input type="checkbox"/> Continue Project Without Change
B. <input type="checkbox"/> Change Project Design and/or <input type="checkbox"/> Change Implementation Plan
C. <input type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

T. Nagy, ENOR
E. Oriol, ENOR

12. Mission/AID/W Office Director Approval

Signature: *Allan R. Furman*
Typed Name: Allan R. Furman

Date: June 24, 1980

Background and Project Description

CARE/HACHO Potable Water II is an extension of, and builds upon the experience gained, in CARE/HACHO Potable Water I (Project #521-0076) which was completed on March 31, 1978. The grant agreement for Phase II, signed in August 1978, provided \$101,000 for furtherance of program objectives during the 27 month period ending Oct 31, 1980.

The purpose of the project is to provide improved access to potable water for approximately 25,000 rural poor living in Haiti's Northwest Peninsula. Under Phase II, CARE planned to construct 18 to 25 water captage systems each serving an average of 1000 people living in a one to three kilometer radius of the source. Three systems built under Phase I were to be repaired and improved, and three were expected to include irrigation components serving a total of about 5000 people.

The criteria used for the selection of each site include: discharge rate and potability of the natural spring, number of people served, community interest in the project, and the ability of CARE/HACHO to organize and supervise self-help construction and maintenance.

Project Accomplishments

The location of systems developed during Phase I and II are shown on the map of the project area (Figure I). The numbers associated with each site on the map are keyed to lists in Tables 1 and 2. As indicated in these tables, 20 systems were completed under Phase I and 15 were completed under Phase II at the time of this evaluation. The systems are more fully described in USAID/ENGR inspection trip notes attached as ANNEX A.

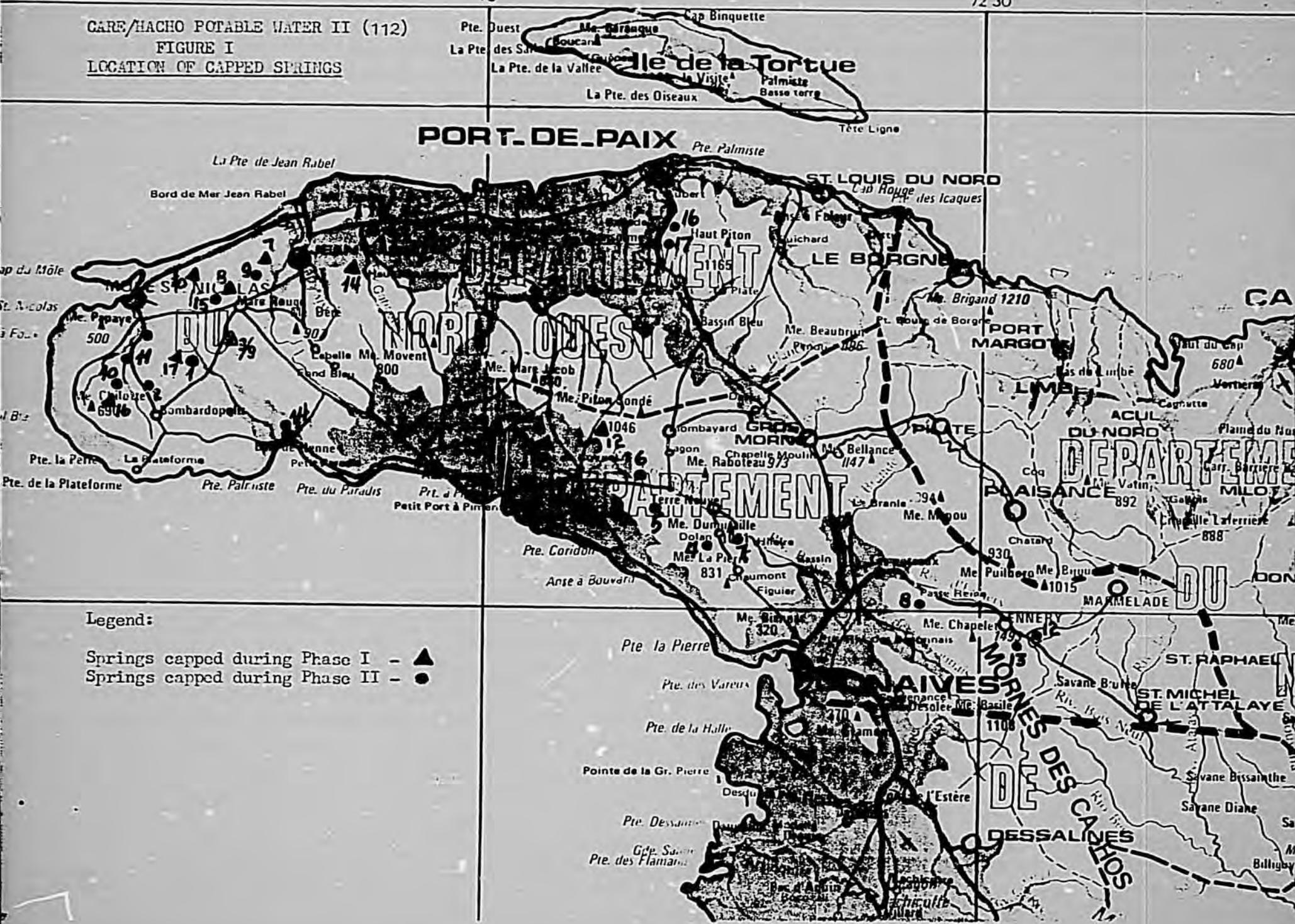
In spite of the fact that there was almost a full year delay in the arrival of vehicles, equipment and the international Engineer, the project is presently only about two months behind schedule. Following the arrival of Mr. Sam Boulos, the international Engineer, in July 1979, an inspection of springs selected during Phase I (Table 3) resulted in the elimination of about half of these original sites. Some of the springs had gone underground, some had only periodic flow, a few were found to be in swampy terrain and others were inaccessible. In the course of this survey several new sites were added resulting in the final selection of feasible sites shown in Table 2.

It is reported that only two or three other natural springs, feasible for development, remain to be exploited in the original project area consisting of that portion of the Northwest peninsula West of a line running roughly from Gonaives North through Gros Morne to the Port de Paix area.

CARE has requested a two month extension of the project through December 1980 in order to permit the development of these additional sites which would bring the total number of sites developed under Phase II to about 20, not including the four Phase I sites which were repaired during the Phase II period.

In view of the outstanding performance of Mr. Boulos in accomplishing project objectives in spite of initial delays, as well as the continuing need to exploit all feasible sources of potable water in the Northwest, and the importance of maintaining the present momentum of the project, approval

CARE/HACHO POTABLE WATER II (112)
 FIGURE I
 LOCATION OF CAPPED SPRINGS



Legend:

- Springs capped during Phase I - ▲
- Springs capped during Phase II - ●

TABLE 1

Projects Completed in Phase I

1. Valoir Fond Noir
2. Collin Nan Fourby
3. Loubier
4. Morne Baguette
5. La Gaudette, Gombo
6. La Reserve
7. Debauche
8. Nan Beauvoir
9. Cotes de Fer/Rodolphe
10. Semi Cotes de Fer
11. Dame Marie
12. Lagon
13. Nan Simone
14. Mahctiere Ka Philippe
15. La Petite Place
16. Chilotte
17. Polvo
18. Marianne
19. Ramonese
20. Barbe Pagnole

TABLE 2

Revised List of Phase II Project Sites

	<u>Estimated Population</u> ^{1/}	<u>Completed</u>
1. Lavaltiere	1200	"
2. Latanier	Irrigation (60 hectares)	"
3. Rodolphe	Irrigation (60 hectares)	"
4. Dolan	1000	"
5. Bois Neuf	2000	"
6. Grosse Roche	300	"
7. Rocher	600	"
8. Navite	1200	"
9. Du Gonge	2000	"
10. Christ	3000	"
11. Corossol	700	"
12. Hatte Censee	500	"
13. Maussambee	600	"
14. Baie de Henne ^{2/}	--	"
15. Bourra	Irrigation (20 hectares)	June 15, 1980
16. Nan Moreau	400	July 1980
17. Nan Guerrier	5000	July 1980

^{1/} Population living within approximately a kilometer radius of the source.

^{2/} Hand dug well (Depth 17')

Note: The first four systems were completed prior to the arrival of the international Engineer. Two or three additional sites are to be selected and developed prior to project termination.

TABLE 3

Original List of Phase II Project Sites

1. Dolan - Terre Neuve
2. Latanier - Cotes de Fer
3. Grosse Roche - T.N.
4. Bourra - Cotes de Fer (irrigation)
5. Bois Neuf/Noel - T.N.
6. Irv, Dos D'Ane
7. Mariel, Massacre - Baie de Henne
8. Mapou, Ti Riviere
9. Moreau, Dos D'ane
10. Nan Sable, Dos D'Ane
11. Rocher, Terre Neuve
12. Palmiste, Nan Tente - Anse Rouge
13. Bord de Mer - Baie de Henne
14. Batado - Barbe Pagnole
15. Marie Noel - Didion - (irrigation)
16. Camp Septieme - Cotes de Fer (irrigation)
17. Nan Beauvoir - Jean Rabel - (reparat.)
18. Debauche - Mare Rouge - (reparation)
19. Nan Fourby - Jean Rabel - (reparation)
20. Nan Dige Cotes de Fer (reparation)
21. Source Dabonne/Guillette
22. Rodolphe - (irrigation)
23. Polvo, Cotes de Fer (irrigation)
24. Riviere Bovest - Nan Polvo
25. Lavaltiere - Mare Rouge

of the extension is recommended.

As can be seen from Figure I, the original project area under Phase I has been extended under Phase II to include regions East of Gonaives and the Northern Artibonite. The reason for this is that, as already mentioned, most natural springs in the Phase I project area which can be readily and economically exploited, given the present status of the road network in that area, have already been developed.

Attempts to locate and develop potable water sources other than natural springs have not been notably successful to date. Because of the absence of major springs in the regions around Bombardopolis and Baie de Hennes, an effort was made under the present project to provide water to this area by hand digging wells. Five wells were dug in the Baie de Hennes area ranging in depth from 6 to about 25 feet, but only one is considered of adequate capacity to be included in the list of project accomplishments (see Phase II site #14 Figure I).

Other organizations have also been involved in water development activities in the Northwest. For example HARZA has been working for several years in the Anse Rouge area drilling deep wells for irrigation. Thirteen holes have been drilled ranging in depth from 100 to about 900 feet. Of this number only five produce water. However, three of the five have discharge rates in excess of 200 GPM.

As a result of the above mentioned experience, a decision was made not to change the focus of the project from spring capping to the more complex and costly technologies of drilling or dam construction. The project has, therefore, explored the Ennery/St. Michel de l'Attalaye/Dessaline area and a number of major springs were found in populated areas which, if fully developed, could have a major impact on the productivity of the region and the health of its population. There is a great potential in this region for expanding agricultural production through irrigation from known sources and also for servicing several existing schools and medical facilities which are in need of a reliable source of potable water.

A Phase III project proposal has already been prepared which focusses on this geographic area. The proposed project, presently being reviewed by CARE/N.Y., intends to construct five new potable water systems which would each supply towns with from 4000 to 7000 inhabitants. In addition, three irrigation systems would be constructed to allow productive year-round cultivation of 60-80 hectares of land at each site.

It is strongly recommended that favorable consideration be given to this OPG proposal when submitted. In order to ensure a smooth transition of personnel and equipment from Phase II to Phase III, it is vital that a funding arrangement be finalized by December 1980.

Potential Problems

Although the water systems developed under this project are relatively maintenance free, some means for systematic oversight in this area is needed. While the newly formed National Potable Water Service (SNEP) is theoretically responsible for maintenance of existing drinking water sources, there is no conclusive evidence available yet that it is capable of fulfilling this mandate.

In view of the fact that SNEP will have an expanding role in community organization and maintenance of potable water systems, and in view of the growing investments in water development, consideration should be given to ways and means of supporting the institutional development of that organization. One possible source of assistance might be through the proposed Resource Training Project.

Project Inputs

The project is managed by CARE staff located in the Gonaive field office. The project staff includes a CARE field representative who is responsible for all CARE activities in the Northwest, and an international Engineer who has the primary responsibility for managing and implementing the potable water project. His staff consist of one Haitian Engineer, one chauffeur/mechanic and two Haitian animateurs/foremen. Local communities

Fountains. Plumbers/masons are hired locally for each project on a contract basis.

The staff appear to be working well under the able and energetic leadership of the international Engineer, Mr. Sami Boulos. Mr. Boulos should be commended for his effective management of the project as evidenced by the significant increase in productivity he has achieved since his arrival about one year ago.

As of May 25, 1980 the project has expended \$64,062.01 of the total \$101,000 obligated. Of this \$16,146.67 was expended for vehicles and equipment, \$31,702.57 for commodities, \$6,213.69 for salaries, and \$9,999.08 for maintenance and operations.

Recommendations

1. Approve the request for a two month time extension for the Phase II project through December 1980.
2. Approve the Phase III OPG proposal so that water development activity may continue uninterrupted after termination of the Phase II activity.

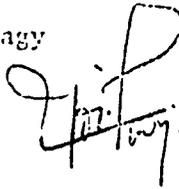
UNITED STATES GOVERNMENT

Memorandum

TO : C/ENG, Mr. Tibor Nagy

DATE: June 16, 1980

FROM : ENG, Edvard Oriol



SUBJECT: Inspection Trip and Evaluation of CARE Potable Water Project in the North-West Department, Phase II (OPG 0112)

1. On June 2, 1980 at 0700, I left Port-au-Prince with Mr. Joel Cotten to go to Gonaives where we met Ms. Judith Collins and Eng. Samy Boulos. This trip was arranged by Joel Cotten to evaluate the work performed by CARE in the area of Terre-Neuve and Ennery during Phase II of the Project. So, we continued with Samy Boulos to make an on-site inspection.
2. Terre Neuve area - In the Terre Neuve area, 4 potable water systems were completed by CARE, using the springs Noel, Grosse Roche, Rocher and Dolan. These systems, completed some months ago, had already been inspected by the writer on October 11, 1979 and a written report made on October 25, 1979. I have nothing to add to this report, except that, presently, the spring Dolan is dried up. If after one month from now, in spite of the rainy season, the spring remains dry, we will be obliged to consider this system as lost and to recover the pipes which will be used for other work. That is really unfortunate because the community of Dolan has average population density and a Social Center is under construction near the already built public fountain.
3. 6/3/80. - Ennery Area - In this area, 3 potable water systems were completed at Navite, Hatte Censée and Monsambé. When I visited this area, on February 14, 1980, only the Navite System was completed (See my report dated February 28, 1980 about the Navite System, the Social Center and the CINEC Center at Mapou Rollin). At that time, the construction of the capping basins at Hatte Censée and Monsambé had just started. Now, these two systems are 100% completed. At Hatte Censée, two public fountains, one with 2 outlet pipes and the second with 3 outlet pipes, were built. The water flow is sufficient at these two fountains. At each one, a control Sluice-gate was installed. The excess water is used to irrigate some pieces of land. We can say that this system was well conceived. The only remark we could make is that these two fountains can be considered as built too close together, only about one km apart. At Monsambé, the capping basin and a public fountain with 3 outlet pipes are completed. The water flow is large enough so that Samy Boulos plans to build a second fountain at a lower level and at a more accessible place. As at Hatte Censée, a control Sluice-gate was installed at Monsambé. At the present time, everything is working normally. We used this opportunity to visit a hospital located on the way. It is managed by members of a Baptist Mission and constitute an important medical



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Center frequented by many patients coming from long distance, as far as St. Michel de L'Attalaye. Pastor Aushierman is the Director. Everything appears to be going well.

4. At 1130 we were back in Gonaives. From 1130 to 1300 Joel Cottien had a final working session with Judith Collins and Samy Boulos at the CARE office, about the evaluation of the project and the plans for the future. I participated at this meeting.

At 1430 we left Gonaives and at 1700 we were back in Port-au-Prince.

5. In the visited area, it is now the rainy season. All plantations are green and drought and famine are not anticipated.