December 1982

This file is closed as of

For further correspondence, please see

Vol. 2

RECORDS MANAGEMENT SECTION
Introduction

1. You should plan to arrive in Colombia on December 5, 1982 and stay for about two weeks. The main objective of your mission is to discuss with Empresas Públicas Municipales de Barranquilla (EPMH) the preparation of the proposed water supply and sewerage project in Barranquilla. While in Colombia, you should also pay brief visits to Instituto Nacional de Fomento Municipal (INIFOM) and Empresas Municipales de Cucuta (EMC) in Cucuta.

Barranquilla (EPMH)

2. You should arrive in Barranquilla on or about December 10, 1982, and stay about one week to discuss with EPMH’s Management, the Bank’s tele of November 2, 1982, assess the status of project preparation and further preparation needs and agree on measures to improve EPMH’s operational, institutional and financial performance during project preparation and loan processing. In particular, you should:

(a) discuss the scope of the proposed project (water and sewerage, solid waste and storm drainage);

(b) review progress in the preparation of engineering, financial and economic feasibility studies and agree with EPMB on a work program for completing these studies to the satisfaction of the Bank (including their financing) by no later than March 31, 1983;

(c) discuss and agree on the content of the feasibility studies to be prepared by EPMB’s consultants;

(d) discuss with EPMB and, if deemed necessary with Municipal authorities, options for streamlining the provision of public services in Barranquilla and in particular assess the possibility of creating separate companies for providing some of the services now rendered by EPMB;

(e) discuss and agree on actions and targets for improving EPMB’s financial performance during the course of project preparation and loan processing (tariff increases, adjustments to tariff structure, payment of overdue debt, reduction of accounts receivable, auto-financing of services).
(f) discuss and agree on actions and targets for improving EMB's operational performance during the course of project preparation and loan processing (reduction of unaccounted-for water, metering of connections of high consumers, source metering, leak-detection and repair); and

(g) determine and agree with EMB on a comprehensive preparation schedule to advance the project to Appraisal and Board Presentation.

Cucuta (EMG)

3. You should spend about one day in Cucuta to get acquainted with the new management of Empresas Municipales de Cucuta and discuss progress in the preparation of the proposed water supply and sewage project, and outline and agree with ING on further studies to determine the impact of the proposed sewage works on water quality in the Zulia River at the Venezuelan border.

Bogota (INSFOPAL)

4. While in Bogota, you should visit INSFOPAL to discuss:

(a) the status of compliance with conditions for first disbursement of Loan 1726-CO; and

(b) the proposed award of consulting services for the institutional development program for subborrowers under Loan 1726-CO.

5. You should deliver a copy of these terms of reference to the Bank's Resident Representative in Bogota and keep him informed about your whereabouts and the mission's recommendations and conclusions. Mr. Lecuona, Senior Loan Officer in charge of these projects, will work with you on the Barranquilla and Cucuta assignments.

6. After return to headquarters you should discuss the findings and recommendations of your mission with me (Barranquilla and Cucuta) and Mr. Yepes (INSFOPAL). You should also update the Project Briefs for the proposed projects in Barranquilla and Cucuta and summarize your discussions with INSFOPAL in a Back-to-Office Report.

Cleared with and cc: Mr. Lecuona, L22DB

cc: Messrs. Wessels, LCPS; Schless, Sokol, L22DB; Yepes, LCPUS;
Rajagopalan, PAS (3); Swahn, EDC; Willoughby, TAD (3);
Morset-Plato, LG; Grothe, L2A; Battez, VPCTR; Gutierrez, LAVCL

cc: Ms. DeVan, LCPS
LAC Files, Division Files

WS:mq
Mr. Walter Stottmann, LCWS

Daniel C. Lecuona, Sr. Loan Officer, LGZDB

COLOMBIA: Cucuta and Barranquilla Water Supply Projects

December 1, 1982

Now that I have given you my comments on the Barranquilla (10/15/82) and Cucuta (10/15/82) Project Briefs, I think we should update both in terms of the Bank’s lending posture and each project’s processing schedule.

I propose that we do that immediately upon return from our mission to those cities during December 6-17, 1982.

I have reminded Mr. Saenz that we need the Legal Department’s findings and opinion on whether the international waters aspects of the Cucuta project (Mr. Lerdau’s May 13, 1982 memo to Mr. Stern and my May 20, 1982 memo to the Working Party) are covered by an international agreement, in order to update the Project Brief and decide if and how the Venezuelan authorities should be approached.

cc: Messrs. Costa, LGP
    Schloss, LGZ
    Linares, LGP
    Collell/Saez/Moraes-Pinto, LGG

OFFICIAL FILE COPY
Bogotá, November 24, 1982

Alberto/Walter:

Attached please find a couple of documents related to urban development and the provision of public services in Barranquilla. The Executive Director of the City’s Chamber of Commerce (he also sits on the Board of Empresas Públicas) is making serious efforts to develop a policy analysis and guidance capability through the joint effort of the chamber and municipal authorities. The basic idea is to provide long-term objectives and continuity to various actions required for improving municipal management and the provision of public services. I recommend you look into this initiative in connection with the upcoming urban sector work and the preparation of the Barranquilla water supply project. The chamber’s initiative would appear to merit our guidance and support as a source of leadership in the above areas.

Regards,

Alfredo B. Gutiérrez

e.e. Lecuona
Goldman
BOOK OF FR/MT SIX

1) SR. RODOLFO AMAYA
GERENTE GENERAL
EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA (EPMB)
BARRANQUILLA, COLOMBIA

3) SR. JORGE GARCIA GOMEZ
MINISTERIO DE SALUD
MINISTERIO DE HACIENDA, CALLE 16, No. 7-39, Piso 7,
BOGOTA, COLOMBIA

3) SR. EDGAR GUTIERREZ CASTRO
MINISTERIO DE HACIENDA
CARRERA 7, 6-45,
BOGOTA, COLOMBIA

4) SR. HERNAN BELIZ PERALTA
JEFE DEPARTAMENTO NACIONAL DE PLANEACION
BOGOTA, COLOMBIA

3) SR. ALFREDO GUTIERREZ
REPRESENTANTE BANCO MUNDIAL
TELEX 396-41308 INTRAFA

6) SR. ERNESTO SUAREZ
CALDE DE BARRANQUILLA
LA ALCaldIA
BARRANQUILLA, COLOMBIA
SR. RODOLFO AMAYA, GERENTE GENERAL, EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA (EPMB), BARRANQUILLA, COLOMBIA. INFORMACION SR. JORGE GARCIA GOMEZ, MINISTRO DE SALUD, SR. EDGAR GUTIERREZ CASTRO, MINISTRO DE HACIENDA, SR. HERNAN BELTZ PERALTA, JEFE DEPARTAMENTO NACIONAL DE PLANEACION, SR. ALFREDO GUTIERREZ, REPRESENTANTE BANCO MUNDIAL, BOGOTA, COLOMBIA Y SR. ERNESTO SUAREZ, ALCALDE DE BARRANQUILLA, COLOMBIA. REF. PROYECTO DE AGUA Y ALCANTARILLADO PARA BARRANQUILLA. A CONTINUACION RESUMIMOS POSICION BANCO SOBRE ESTE PROYECTO BASADA EN OBSERVACIONES MISION DE AGOSTO 1982, Y REUNION VEINTIOCHO OCTUBRE ENTRE REPRESENTATIVES EPMB Y BANCO. (AAA) DESCRIPCION Y OBJETIVOS PROYECTO DOS PUNTOS BANCO DISPUESTO ASISTIR EPMB EN EJECUCION PROYECTO PARA CUBRIR NECESIDADES MÁS URGENTES AGUA POTABLE, ALCANTARILLADO SANITARIO Y PLUVIAL, Y DISPOSICION DE BASURA, CON MIRAS SATISFACER NECESIDADES LARGO PLAZO EN PROYECTO SUBSECUENTE. PRINCIPALES OBJETIVOS PROYECTO SERIAN DOS PUNTOS (UNO) ELIMINAR RACIONAMIENTO MEDIANTE EXTENSION Y REHABILITACION DEL SISTEMA AGUA POTABLE, REDUCIR AGUA NO CONTABILIZADA, Y PROVEER AGUA A CONSUMIDORES POBRES SIN SERVICIO INICIALMENTE MEDIANTE PILAS, (DOS) REHABILITAR SISTEMA ALCANTARILLADO SANITARIO E INCREMENTAR CAPACIDAD RECOLECCION EN AREAS CRITICAS, (TRES) CONSTRUIR OBRAS

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CLASS OF SERVICE: BEAR
TELEX NO:

Barranquilla Water Supply

CLEARANCES AND COPY DISTRIBUTION:

Cleared with: Mr. Leccuna, LC2
cc: Guzman, LCFSY, Yepes, LCFS

DRAFTED BY: Weltmann

AUTHORIZED BY: Rene Costa, Sr., LCFS

DEPARTMENT: LAC Projects

SECTION BELOW PORTION OF CABLE SECTION

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MAS URGENTES ALCANTARILLADO PLUVIAL EN CENTRO BARRANCQUILLA,
(CUATRO) MEJORAR SERVICIO RECOLECCION BASURAS Y VACIADERO MEDIANTE
RELLENO SANITARIO, Y (CINCO) MEJORAR FINANCIAS, ADMINISTRACION Y
OPERACIONES EPMB. (BBB) COSTO Y FINANCIAMIENTO PROYECTO DOS
PUNTOS PRELIMINARMENTE BANCO ESTIMA COSTO PROYECTO, INCLUYENDO
CONTINGENCIAS, EN APROXIMADAMENTE SESENTA MILLONES DOLARES. PLAN
FINANCIERO PRELIMINAR DOS PUNTOS FONDOS INTERNOS EPMB 40 POR
CIEN, PRESTAMO BANCO 35-40 POR CIEN, OTRAS FUENTES INTERNAS O
EXTERNAS 20-25 POR CIEN. (CCC) CALENDARIO PROPUESTO TRAMITACION
PRESTAMO BANCO DOS PUNTOS SUJETO A REQUISITOS ENUMERADOS PARRAFO
(DDD) MISION PREPARACION (PREP) NUEVE A QUINCE DICIEMBRE 1982,
PRE-EVALUACION (PREVAL) MARZO-ABRIL 1983, EVALUACION (EVAL) MAYO-
JUNIO 1983, PRESENTACION DIRECTORIO BANCO ENERO 1984, INICACION
OBRAS CONSTRUCCION SEGUNDO TRIMESTRE 1984. (DDD) PARA CUMPLIR
ESTE CALENDARIO, BANCO NECESITA QUE EPMB COMPLETE PREPARACION
PROYECTO Y MEJORE SU SITUACION FINANCIERA Y EFICIENCIA OPERATIVA.
A CONTINUACION RESUMIMOS PENSIAMIENTO ACTUAL BANCO SOBRE LAS
CONDICIONES MINIMAS QUE EPMB DEBE CUMPLIR, PARA CUMPLIR CALENDARIO
PROPUESTO DOS PUNTOS (UNO) COMPLETAR ANTES PREVAL, EN FORMA
SATISFACTORIA PARA BANCO, ESTUDIOS FACTIBILIDAD (INGENIERIA,
FINANCIERO, ECONOMICO), PARA TODOS LOS COMPONENTES PROYECTO.
DISCUTIREMOS DETALLE CONTENIDO DE ESTUDIOS DURANTE PREP. COMPLETAR
ANTE EVAL SO POR CIEN DISEÑOS DEFINITIVOS. EN VISTA PROBLEMAS
FINANCIACION ESTUDIOS Y DISEÑOS PERSONAL BANCO DISPUESTO
RECOMENDAR FINANCIAMIENTO RETROACTIVO COSTOS EN DIVISAS FACTURADOS
A EPMB DURANTE DOCE MESES PRECEDENTES FIRMA CONVENIO PRESTAMO, A
CONDICION LABOR CONSULTORES SE COMPLETE A TIEMPO Y
SATISFACTORIAMENTE, LO QUE BANCO SUPERVISARA RIGurosAMENTE DURANTE
PERIODO PREPARACION. ESPERAMOS ESTA OFERTA AYUDA A EPMB A
CONSEGUIR FINANCIAMIENTO PARA COMPLETAR ESTUDIOS Y DISEÑOS. SOBRE
ESTA BASE, BANCO URGE A EPMB A PREPARAR PROGRAMA DE TRABAJO, QUE
REVISAREMOS DURANTE PREP, PARA COMPLETAR ESTUDIOS Y DISEÑOS ANTES
DE PREVAL, (DOS) ASPECTOS INSTITUCIONALES DOS PUNTOS BANCO
OPINA QUE RESPONSABILIDAD POR DIVERSOS SERVICIOS NO RELACIONADOS
PERJUDICA VIABILIDAD INSTITUCIONAL, ADMINISTRATIVA Y FINANCIERA
EPMB Y CREE QUE CONCENTRACION EPMB EN SERVICIOS SANITARIOS Y
ELIMINACION SERVICIOS SUSCEPTIBLES EXPLOTACION COMERCIAL
CONSTITUYEN ALTERNATIVAS DIGNAS CONSIDERACION AUTORIDADES
COMPETENTES. EN TAL SENTIDO PROPUESTA CREACION METROAGUAS PARECE
INICIATIVA PROMETEDORA. MISSION PREP ESPERA DISCUTIR CON EPMB Y

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CLASS OF SERVICE: TELEX NO: DATE: 11-24-82

SUBJECT: DRAFTED BY:

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DEPARTMENT:

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AUTORIDADES MUNICIPALES PLANES REORGANIZACION SERVICIOS PUBLICOS
BARRANQUILLA PARA ASEGURAR FINALIZACION PLAN PERTINENTE AL TIEMPO
DE PREVAL, (TRES) ASPECTOS FINANCIEROS DOS PUNTOS MEJORA
SUSTANCIAL SITUACION FINANCIERA EPMB ES INDISPENSABLE ANTES
PRESENTACION PROPUESTA PRESTAMO AL DIRECTORIO BANCO PUNTO APARTE.
(ALPHA) SIGUIENTES METAS DEBEN SER ALCANZADAS ANTES DICIEMBRE
1983 DOS PUNTOS (A) CANCELAR TOTALMENTE OBLIGACIONES VENCIDAS EPMB,
(B) CON PRECISINDENCIA PLAN DEFINITIVO REORGANIZACION INSTITUCIONAL
EPMB, ELIMINACION SUBSIDIOS A OTROS SERVICIOS CON INGRESOS AGUA Y
ALCANTARILLADO Y ESTABLECIMIENTO MECANISMOS FINANCIEROS ADECUADOS
PARA INGRESOS DE CADA SERVICIO CUBRAN POR LO MENOS SUS COSTOS DE
OPERACION Y SERVICIO DEUDA (C) REDUCCION DE CUENTAS POR COBRAR
A CUATRO MESES DE FACTURACION MEDIANTE PROGRAMA REDUCCION
PROGRESIVA ENTRE DICIEMBRE 1982 Y EVAL, (BETA) PARA ALCANZAR
ESTAS METAS BANCO CONSIDERA NECESARIO DOS PUNTOS (A) CONTINUAR
DURANTE 1983 ACTUALES INCREMENTOS DE TARIFAS DEL 2 POR CIENTO
MENSUAL, (B) AUMENTOS ANTES DE PREVAL TARIFAS PROMEDIO EN POR LO
MENOS 30 POR CIENTO PUNTO, (C) INTRODUCIR EN ESTRUCTURA TARIFAS
MAS PROGRESIVIDAD PARA ALTOS NIVELES DE CONSUMO, E INCREMENTAR
TARIFA FIJA PARA CONEXIONES SIN MEDIDOR. (GAMMA) PARA QUE MISION

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SUBJECT: DATE: 11-24-82

CANCELED BY:

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Secure—Confidential as Noted
AGRADEZCO SU CONFIRMACION CONVENIENCIA ESTA FECHA. CORDIALES
SALUDOS, COSTA, INTBAFRADE
(ONE) HAVE COMPLETED REVIEW DRAFT PROJECT BRIEF FOR BARRANQUILLA WATER SUPPLY AND SEWERAGE DISTRIBUTED OCTOBER SIX WHICH IMPRESSED ME AS SOUND AND THOROUGH BASIS FOR PROJECT PROCESSING.

(TWO) HAVE NUMBER OF QUESTIONS ON DRAFT AND WOULD TRY TO SEND MARKED-UP COPY TO HEADQUARTERS WITH FIRST AVAILABLE TRAVELER. WOULD LIKE TO ANTICIPATE YOU SOME MAIN CONCERNS:

*(AAA) SIZE OF PROJECT: CLEARER DIFFERENTIATION DESIRABLE.

*BEETLE (I) MASTER PLAN YEAR 2000 (II) INTERMEDIATE INVESTMENTS THROUGH 1990 AND (III) QUOTE LIMITED UNQUOTE INVESTMENTS THROUGH 1987 PROPOSED FOR INCLUSION IN OUR PROJECT.

(BBB) SUGGEST RECONSIDERING ADVISABILITY INCLUDING SOLID WASTE COMPONENT. EYE DO NOT QUESTION NEED FOR IMPROVEMENT THIS
SERVICE BUT DOUBT EPHD'S CAPACITY TO HANDLE IT GIVEN ITS REDUCED ABILITY TO MANAGE BASIC TASKS (WATER AND SEWER-

SEE ALSO (EEE) BELOW.

(CGG) FULLY AGREE EPHD'S CURRENT FINANCIAL CONDITION MUST IMPROVE BEFORE LOAN PROCESSED. IN VIEW, HOWEVER, CURRENT POPULAR PROTESTS AGAINST PUBLIC SERVICE TARIFF INCREASES AND INITIAL GOVERNMENT RESPONSE ON POWER TARIFFS, EYE DOUBT FEASIBILITY MEASURES RECOMMENDED PARAGRAPH 6.06 (A) DRAFT BRIEF SUGGEST LINKING SUBSEQUENT STEPS LOAN PROCESSING BY BANK TO SPECIFIC, QUANTIFIED IMPROVEMENTS IN EPHD'S FINANCIAL PERFORMANCE TO MINIMUM LEVEL JUSTIFYING BOARD PRESENTATION. THESE GRADUAL FINANCIAL TARGETS TO BE LINKED TO INSTITUTIONAL CHANGES SUGGESTED (EEE) BELOW.

(EEE) EPHD'S INSTITUTIONAL PROFILE AND FINANCIAL CONDITION REMARKABLY CONSISTENT WITH SITUATION OTHER MUNICIPAL WATER UTILITIES KNOWN TO BANK IN COLOMBIA, ESPECIALLY REGARDING INSTITUTIONAL AND MANAGERIAL VIABILITY AND FINANCIAL SOUNDNESS AND EFFICIENCY. AGREE WITH RECOMMENDED MEASURES BUT BELIEVE THEY SHOULD GO FURTHER AND AT LEAST SOME SHOULD COME EARLIER.
(II) AS TEST OF COMMITMENT TO CHANGE BY BORROWING AND MUNICIPAL AND NATIONAL AUTHORITIES AND (III) AS PROTECTION AGAINST UNSATISFACTORY PERFORMANCE AND PAINFUL ENFORCEMENT OUR REMEDIES. MY MAIN SUGGESTION HERE IS CONSTITUTION SINGLE AGENCY INSTITUTIONALLY AUTONOMOUS (THOUGH LEGALLY ACCOUNTABLE) AND FINANCIALLY Viable, RESPONSIBLE FOR WATER, SEWERAGE AND DRAINAGE, TOGETHER WITH SPIN-OFF OF OTHER CURRENT EPHE’S SERVICES EITHER TO LICENSEES OR CONTRACTORS (V.G. MARKET PLACES, SLAUGHTERHOUSES, STREET PAYING, SOLID WASTE COLLECTION) OR TO MUNICIPAL DIVISIONS EXCLUSIVELY FINANCED OUT OF GENERAL REVENUES (V.G. ZOO AND PARKS).

(THREE) GRATEFUL YOUR ADVICE WHETHER ABOVE PROPOSALS, ESPECIALLY (CCC) AND (EEE), ACCEPTABLE, IN WHICH CASE I WILL (I) ATTEMPT TO EXPLORE WITH EPHE, MINSAUD AND DNP BEFORE DEPARTURE AND (II) RECAST PROPOSED LETTER TO COLOMBIAN
REGARDS, LECUONA INTSAFRAD

PLEASE READ:

(CCC)'LAST LINE' CHANGES SUGGESTED (EEE) BELOW

THEM CONTINUES (DDD) PREFER . . .

249423 WORLD BANK

BR 210
CO - Water Supply of San Juan Barranquilla

(10/5/82)
## Project Brief Update

<table>
<thead>
<tr>
<th>Type of Report</th>
<th>State Which Parts of Report Each Addressee Should Focus on</th>
<th>Clearance Required by Close of Business on</th>
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<td>Per Discussion/Action</td>
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<tr>
<td>Mr. van der Mer</td>
<td>X</td>
<td>Clearance is requested of letter (Annex 5) from Messrs. Wessels and Leuena by c.o.b. October 8, 1982</td>
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<tr>
<td>Mr. Giesner</td>
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<td>Mr. Jennings</td>
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<td>Mr. Wessels</td>
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<td>LAC Programs Division Chief</td>
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<td>Loan Officer</td>
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**Comments by Originating Division Chief:**

The attached Project Brief is a reformulation of the last Project Brief dated August 29, 1980. This became necessary to reflect a change in sector strategy for Colombia and to adjust project objectives and description after the publication of the water supply and sewerage master plan for Barranquilla.

At present, Empresas Publicas Municipales de Barranquilla (EPM) is a rather weak entity with critical financial problems. Nevertheless, EPM's financial performance could improve to a satisfactory level if EPM follows the recommendations presented in para. 6.06.

In view of EPM's institutional and financial weakness, the proposed project would include extensive technical assistance for institution building and investments would be limited to covering only most urgent needs.

The proposed letter (Annex 5) informs EPM's new manager of the Bank's position on EPM and the proposed project and stipulates conditions for appraisal. The attached letter should be cleared by c.o.b. October 8, 1982.

**Footnotes:**

a. Data by which draft letters (the annex number) would be issued if no comments are received (see LCP Director Memo No. 14, Revised Addendum).

b. Only if report contains economic issues which require attention and/or decision.

c. Where points are flagged to or guidance sought from persons in the Central Project Staff (CPS) or Projects Advisory Staff (PAS), their names should be listed.

d. State if the report raises any issues; if so, indicate relevant paragraph numbers, and/or briefly describe the issue(s) involved.
BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

PROJECT BRIEF UPDATE

1. SECTOR DEVELOPMENT, ISSUES, OBJECTIVES AND STRATEGIES

Service Levels and Quality

1.01 About 78% of Colombia's urban population 1/ currently has access to potable water through house connections and about 70% are served by a sewerage system. In rural areas 2/, about 60% of the population receives piped water supply and about 70% is served by sewerage systems. Although there is reason to believe that these estimates overstate actual service levels, the availability of water supply and sewerage services in Colombia ranks among the highest in South America. In most large and medium-size urban centers, the quality of service is generally acceptable, although service interruptions occur frequently. People with insufficient service or no service at all tend to belong to the poorest segment of the population. In smaller urban communities and particularly in rural areas, the quality of service is often deficient in both quantity and quality.

With service levels of 51% for water supply and 40% in sewerage, Barranquilla, Colombia's largest city in the Atlantic Coast Region (current population about 1.1 million) has service levels way below the national average. Data on water supply and sewerage services in Barranquilla are presented in Annex 2.

Sector Organization

1.02 The water supply and sanitation sector in Colombia is under the responsibility of the Ministry of Public Health, which in coordination with Departamento Nacional de Planeación (DNP) formulates national sector policies. Two institutions are responsible for implementing national policies: Instituto Nacional de Fomento Municipal (INSFOPAL) for urban areas and Instituto Nacional de Salud (INAS) for rural areas. On the local or regional level, Empresas de Obras Sanitarias (EMPOS) and Empresas Publicas Municipales (EPM) construct and operate water supply and sewerage systems. EPM, serving large and medium-size cities, are autonomous entities created by and under the control of municipal authorities. EMPOS provide service in small cities and urban centers. Theoretically, INSFOPAL has direct control over the EMPOS, as it is the main shareholder in most of them, is represented on their Boards of Directors, has the right to appoint General Managers and to take over their management in case of deficient performance.

1/ About 60% of Colombia's population of some 29 million living in communities with 2,500 or more inhabitants.

2/ About 40% of Colombia's population.
Sector Objectives and Constraints

1.03 Colombia has subscribed to the targets of the International Water Decade. By 1990, the entire urban and rural agglomerated population is to be provided with safe water supply and excreta disposal. For the rural dispersed population, the target is to achieve a 20% piped water supply and a 100% sanitation coverage. It is estimated that between now and 1990 total investments on the order of US$1.500 million in 1981 prices (about US$300 million a year) would be required to reach these targets. Average annual sector investment in the 1970s was about US$140 million, peaking in 1975-76 at about US$180 million. Considering that the financial and institutional weakness of sector institutions on all levels caused average annual sector investments to drop since 1976 and fall below the US$100 million level in recent years, it is clear that decade goals will not be attained if the central and local authorities do not share a strong commitment to sector development.

II. BANK/COUNTRY GOALS, ROLE AND SECTOR LENDING STRATEGY

2.01 During the last decade, external financing accounted for about 25% of total estimated sector investment. With more than US$250 million committed in loan funds since 1968, the Bank provided close to 70% of external funds. The Bank intends to continue its role as primary external lender for sector projects provided that suitable projects for efficient application of loan funds are prepared.

2.02 In the past, the Bank used a three-pronged approach to provide funds for Colombia's water supply and sanitation sector. Financing for large urban centers was provided through loans directly to the municipal companies (e.g., Bogota, Cali). LCWMS projects in medium-size cities were financed through INFOPAL as an intermediary. In addition, INFOPAL is the channel used to execute water supply components of urban development projects financed by the Bank. Rural water supply projects were supported through TANAS as parts of Integrated Agricultural Development Projects (IMI) and Nutrition Improvement Projects (PAN). In spite of considerable institutional development efforts by the Bank during the execution of three multi-city projects (Loans 860, 1072, 1726-CO), INFOPAL has failed to develop into an acceptable agent for the transfer of Bank resources to the urban sector. Therefore, the Bank has decided that direct lending to qualifying EPM or EMPOS (1982 Colombia CPP) would be the best short-term strategy to help sector development. Priority would be given to those EPM and EMPOS which demonstrate the need for sizeable investments and have the potential to attain financial viability and the minimum institutional strength needed to carry out Bank projects successfully. Meanwhile, and since the use of an effective national intermediary institution remains an attractive strategy to reach several urban areas through single lending operations, the Bank would continue its dialogue with the Colombian Government on sector lending. Should the Government be successful in improving INFOPAL or create another channel for multi-city lending satisfactory to the Bank, the Bank would consider the resumption of lending through such
channel. The Bank's change in lending strategy has not yet been discussed with the new Colombian Government. Preliminary indications are, however, that the new Government would have no objections to direct Bank lending to specific cities. Because of their experience with INSUFAL, local water companies clearly prefer direct Bank lending. Barranquilla and Cucuta have been chosen as the most promising cities to implement the new strategy.

III. PROJECT ORIGIN AND STATUS OF PREPARATION

3.01 A Bank mission visited Barranquilla in November 1979 at the request of Empresas Publicas Municipales de Barranquilla (EPMB), which would be the Borrower for the proposed project and identified the need for large investments in this city. In the absence of a clear expansion strategy for Barranquilla's water and sewerage systems, the Bank requested EPMB to carry out comprehensive master plans and feasibility studies for water supply and sewerage. In early 1981, EPMB contracted the services of an US consulting engineering firm to carry out the preparatory work recommended by the Bank with part of the financing coming from FONADE.

3.02 In April 1982, the consultants completed the master plan proposing acceptable solutions to expand water and sewerage systems in the Metropolitan Area through the year 2000 with intermediate steps for the year 1990. Based on the assumption that 95% of the people living in the Metropolitan Area of Barranquilla were to receive adequate water supply and sewerage services by 1990, the master plan identified total investment needs of some US$130 million in mid-1982 prices (US$94 million for sewerage and US$36 million for water supply). Since neither the financial capabilities nor the implementation capacity of EPMB would be sufficient to carry out a project of this size, EPMB and the Bank agreed to develop a first stage project, which would include only the most urgently required works. Currently, EPMB's consultants are identifying the scope of the project to be proposed for Bank financing and are preparing the feasibility studies. Some progress is also being made in the preparation of final designs. The present project preparation schedule calls for the completion of first drafts of the feasibility studies by the end of November 1982. About 50% of the final designs for the project are scheduled to be available by the end of February 1983. All final designs and bidding documents are expected to be completed by mid-1983. This schedule is tight and to a large degree depends on EPMB's cooperation and ability to make prompt progress payments to the consultants (para. 6.01).

IV. PROJECT OBJECTIVES AND RELATION TO SECTOR

4.01 The major objective of the proposed project would be to: (a) strengthen EPMB's financial and institutional capabilities; and (b) to carry out limited investments in water supply, sewerage, solid waste management and storm drainage addressing the most urgent needs in
Barranquilla. The proposed water supply component would be of particular importance in view of the fact that EPBE’s inability to offer adequate water services is severely impeding urban development in Barranquilla. Particular project objectives would be:

(a) to raise water supply coverage from a current 51% to about 95%, to alleviate widespread water rationing to existing customers, and to reduce the rate of unaccounted-for water from a current 43% to 25% by 1987;

(b) to reduce environmental pollution and public health hazards by improving sewerage services and solid waste water collection and disposal; and

(c) to alleviate chronic flooding problems in some areas of downtown Barranquilla by improving storm drainage facilities.

4.02 The project’s objectives have the full support of the Colombian Government and would be in line with the Bank’s country and sector goals. Likewise, the proposed project would be consistent with the Bank’s strategy for lending directly to individual cities with high needs.

V. PROJECT DESCRIPTION AND JUSTIFICATION

5.01 The proposed project, which would be executed during the 1984-89 period, would include the following major components:

(a) Water Supply: construction of water pumping, transmission, storage and distribution facilities and public standpipes; purchase and installation of about 80,000 water meters and meter shop equipment; system rehabilitation through replacement/repair of valves, hydrants, and leak detection; and improvement of existing water treatment facilities;

(b) Sewerage: construction of various collectors and a sewerage pumping station and purchase of maintenance equipment;

(c) Solid Waste: purchase of equipment for collection of solid waste and construction of a sanitary landfill and installation of maintenance facilities;

(d) Storm Drainage: construction of open drainage channels in downtown Barranquilla; and
(a) Technical Assistance-Consulting Services-Training: users survey and tariff study for all services under present EPMH responsibility (i.e. water supply, sewerage, solid waste, etc.); strategic institutional study; improvement of management, administrative, and control systems and of construction and operation capacity; engineering designs; supervision of construction and training of EPMH personnel.

5.02 Since the definite scope of the project components is still being developed, a precise cost estimate is not yet possible. The preappraisal mission, scheduled to visit EPMH after the completion of drafts of the feasibility studies, would establish a more precise project scope and cost estimate. Nevertheless, the following preliminary estimates of ranges of cost can be made.

<table>
<thead>
<tr>
<th>Component</th>
<th>Probable Cost Range (US$ Million)</th>
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</thead>
<tbody>
<tr>
<td>Water Supply</td>
<td>20 - 25</td>
</tr>
<tr>
<td>Sewerage</td>
<td>8 - 10</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>4 - 6</td>
</tr>
<tr>
<td>Solid Waste</td>
<td>2 - 4</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td>4 - 6</td>
</tr>
<tr>
<td>Total Base Cost (1979/1982 prices)</td>
<td>38 - 51</td>
</tr>
<tr>
<td>Contingencies (about 40%)</td>
<td>15 - 20</td>
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<tr>
<td>Total Cost</td>
<td>53 - 71</td>
</tr>
</tbody>
</table>

The foreign exchange component of the proposed project would be about 35%-40% of the total project cost. The Bank Loan would, therefore, be about US$23 million.

5.03 The proposed project would substantially improve provision for water supply services in Barranquilla. After the completion of the project in 1989, water rationing would disappear and some additional 400,000 people would be served by house connections. About 350,000 people, mostly belonging to Barranquilla’s low income who live today in areas served by tank trucks at exorbitant costs, would receive water through public standpipes as a first step towards full service via house connections. The sewerage component would improve the removal of wastewater from the city’s central areas, where ponding of sewage is commonplace because of overloaded existing collectors. The storm drainage component would alleviate the frequency of street flooding in downtown Barranquilla, where at present traffic movement is paralyzed for hours after average-size rainstorms. The solid waste component would create more sanitary conditions throughout the city by improving the collection efficiency and provide safe solid waste disposal.
VI. MAIN PROJECT ISSUES AND RECOMMENDATIONS

Project Preparation

6.01 Before appraisal can take place, EPMB's consultants have to complete the feasibility studies and about 50% of final designs for the water supply and sewerage components. The completion of these tasks is now scheduled for March 1982. In the recent past, the consultant's progress has been slower than expected because of EPMB's failure to pay the consultants on time. Continued delays in paying consultants may lead to interruptions in project preparation and delay appraisal. EPMB's new management has been advised of the urgency and importance of the ongoing preparation effort (see telex, Annex 1). No preparatory work has been initiated for the proposed solid waste and storm drainage components. Preliminary designs exist for storm drainage.

6.02 Recommendation. The proposed solid waste and storm drainage components would be included in the project, provided EPMB makes available the following information at appraisal time: a feasibility study for the proposed sanitary landfill operation, including an equipment list and cost estimates and preliminary designs and updated cost estimates for the storm drains.

EPMB's Institutional Capabilities

6.03 EPMB provides water supply, sewerage, solid waste collection and disposal services and is responsible for the maintenance and operation of marketplaces, slaughterhouses and a zoological park. This combination of responsibilities is creating complex problems in the management and the financing of the company. EPMB's management and administrative systems and operations are deficient (Annex 3). In particular, financial statements do not allow an adequate financial analysis by service. The outgoing administration has been considering plans for restructuring EPMB, including the separation of services. EPMB is the recipient of a US$10.06 million Bank Loan for a water supply and sewerage improvement project channeled to EPMB via INSPOL under Loan 1072-00. The works in Barranquilla are scheduled for completion in December 1982, almost three years behind appraisal expectations. The operational, institutional and financial targets set for EPMB were not fully achieved. The reasons for EPMB's rather disappointing performance are mainly inadequate project preparation, management and financial problems and INSPOL's inability to provide sufficient project supervision.

6.04 Recommendation. A strategic management study to be included under the proposed project should analyze EPMB's functions and recommend the most efficient institutional arrangement and financing mechanisms (taxes vs. tariff vs. valorization) for providing public services in Barranquilla. Technical assistance and training in almost all areas of management, administration and operation must be an item of highest priority in the scope of the proposed project. In order to have reliable financial information available at appraisal, EPMB should engage consultants to
prepare for each service an estimate of the 1982 balance, revalued fixed assets and depreciation and determine a reasonable allocation of expenses among services.

EPMB’s Finances

6.05 EPMB’s financial position (Annex 4) is poor. While water supply and sewerage services are expected to generate a net income in 1982, rates of return for these services of around 12% in 1981 and 1982, do not permit enough internal cash generation for system replacement and rehabilitation, yet alone for their expansion. The current average water tariff of about Col$11/m³ is slightly lower than that of other large Colombian cities. In addition, income from the water supply and sewerage service has been used to cover the deficits incurred in EPMB’s other services. Solid waste operations, for instance, are highly deficitary and in spite of a recent 150% tariff increase, are projected to lose about Col$230 million (US$3.6 million) in 1982. Moreover, EPMB has a dismal record in collecting its bills (accounts receivable have reached a level of 7-5 months of revenues). Acute cash problems (estimated 1982 deficit is Col$600 million or US$92 million) are being experienced, and EPMB is not in a position to fully meet its current financial obligations (e.g. suppliers, electric company).

6.06 Recommendations. The mission considers that EPMB’s financial viability could be restored by the end of 1983 if drastic measures are taken. The mission recommends that EPMB take the following actions before appraisal:

(a) implementation of a 30% tariff increase for water, the continuation of monthly tariff increases of about 2% after 12-31-82, and adjustments to the current tariff structure, in particular the introduction of higher progressivity and increase of charges for unmetered connections;

(b) presentation to the Bank of a plan to achieve by the end of 1983, the discontinuation of all subsidies from water and sewerage services to other services and the establishment of adequate financing mechanisms for each service, such as the setting of tariff and taxes permitting to cover as a minimum operating costs and debt service payments; and

(c) presentation to the Bank of an acceptable schedule to gradually reduce accounts receivable to a reasonable level (6 months of billings) by the end of 1983.

Financing Plan

6.07 To date, no financing plan for the project has been established. About 60% of total project investment and interest during construction would have to come from EPMB’s internal cash generation and other local sources. Preliminary financial projections indicate that EPMB would
generate sufficient internal funds to support the water and sewerage components provided that after 1983 tariffs are periodically adjusted for inflation. The source of counterpart funds for the solid waste and storm drainage components is not yet determined.

6.09 Recommendation: Before appraisal, EPMB should indicate the source of counterpart funds and assure the availability of these funds separately for the water supply and sewerage, solid waste and storm drainage components.

Water Production

6.10 A further increase in water production capacity is expected to become necessary in 1986/87. EPMB has already contracted with Degremont, a French supplier of treatment plant equipment, the construction of Plant No. 5 (1.25 m³/s). For the financing of this plant, a suppliers credit covering 40% of the project cost has been made available. EPMB has not been successful in acquiring the remaining financing. As reported earlier, (BTO Report of November 25, 1981) the Bank has strong reservations about the construction of this plant for financial and technical reasons.

6.11 Recommendation. If the financing of Plant No. 5 is not assured by appraisal, EPMB’s strategy for increasing its water production capacity should be reexamined and consideration to finance the facilities needed to assure additional water production capacity should be given high priority.

Health Education

6.14 There is a need to educate the poor people living in the project area in the proper use of available water, safe excreta and wastewater disposal and in personal sanitation. PHM has prepared a Public Health Sector Strategy Paper which recommends Bank financing of Integrated Public Health Projects in Colombian cities.

6.15 Recommendation. To enhance the health benefits from the provision of safe water, a Health Education and Improvement Campaign should complement the proposed project. It is suggested that the Bank include Barranquilla in the Integrated Public Health Improvement Project under discussion with PHM, or include a Health Education Component as part of the project. The next mission should discuss this matter in more detail with EPMB and public health authorities in Barranquilla.

VII. CRITICAL PATH FOR PROJECT PREPARATION

7.01 A summary of activities to advance project preparation to appraisal is presented below. Conditions for appraisal are summarized in Annex 5 (draft letter to EPMB).
<table>
<thead>
<tr>
<th>ACTIVITY</th>
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<th>RESPONSIBILITY</th>
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</thead>
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<tr>
<td>Completion first draft feasibility studies</td>
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<td>EPME/Consultants</td>
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<tr>
<td>Preappraisal mission I</td>
<td>12/82</td>
<td>Bank</td>
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<tr>
<td>Completion feasibility studies</td>
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<tr>
<td>Preappraisal mission II</td>
<td>2/83</td>
<td>Bank</td>
</tr>
<tr>
<td>Completion of about 50% of design work</td>
<td>3/83</td>
<td>EPME/Consultants</td>
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<tr>
<td>Completion preparatory work for solid waste and storm drainage components (para. 6.02)</td>
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<td>EPME/Consultants</td>
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<tr>
<td>Compliance with conditions for appraisal (Annex 5, Attachment 1)</td>
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<td>EPME</td>
</tr>
<tr>
<td>Appraisal</td>
<td>4/83</td>
<td>Bank</td>
</tr>
</tbody>
</table>

**VIII. PROJECT ORGANIZATION AND IMPLEMENTATION**

8.01 EPME does not have the staff required to organize and administer the proposed project. For the successful execution of the project, it is essential that EPME establish an adequately staffed Project Execution Unit and engage the services of a qualified engineering consultant to administer and supervise the execution of the project. For optimal supervision and coordination, the technical assistance program should be carried out by a minimum number of qualified consulting firms. In view of EPME’s institutional weakness, the proposed project would require, at least initially, close supervision by the Bank.

**IX. INTRA-BANK COORDINATION AND MANPOWER PLANNING**

9.01 The project preparation schedule calls for two preappraisal missions prior to appraisal. These, and the appraisal mission, should be staffed by an engineer and a financial analyst. Appraisal would require a minimum of three weeks in the field. The total manpower required to advance the project through Board Presentation is estimated at 7-8 man-months. LCPME staff is available to do the work.
X. STATUS OF DIALOGUE WITH BORROWER AND GOVERNMENT

10.01 The Bank has reached a basic agreement on the project concept with the previous management of EPMB and local and national authorities. As a result of the recent change in government, all officials involved with the project have been replaced. A letter (Annex 5) should be sent to the new authorities (EPMB, Mayor of Barranquilla, GNP) summarizing the project concept, remaining project preparation work and conditions for appraisal. The next mission to Barranquilla should be contingent on an affirmation by EPMB’s new management of the intention to continue with the project.

Project Brief prepared by: Messrs. Stottmann and Linares, LCPWS

cc: Messrs. Pfeffermann, Landau, LCMV; van der Meer, Vensing, Ray, LCPWS; Lari, LGM; Schloss, 3, Legen, Sokol, LCPDB; Rajgopal, 4, PAS; Swahn, EDC; Willoughby, 3, Freedman, TWD; Saaz, LEG; Mattori, CTRVF; Kapur, GDI; Yepes, DeVos, LCPWS; LACIE
EMPRESCAS PÚBLICAS MUNICIPALES DE
BARRANQUILLA, BARRANQUILLA, COLOMBIA. DIRIGIDO A ROGOLFO AMAYA,
GERENTE GENERAL. EN PRIMER LUGAR LE FELICITAMOS POR SU
NOMBRAMIENTO COMO GERENTE GENERAL DE EPM Env. EL BANCO DESEA
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PROYECTO DE AGUA Y ALCANTARILLADO EN BARRANQUILLA. EN ESTE
MOMENTO CONSIDERAMOS DE SUMA IMPORTANCIA Y URGENCIA LA
CONTINUIDAD DE LA PREPARACIÓN DEL ESTUDIO DE FACTICIEDAD Y
DISEÑOS. CON RELACIÓN A LA SOLICITUD DE GARANTÍA EXPRESADA EN
TELEX DE EPM DEL SEPTIEMBRE 6, 1982 LE MANIFESTAMOS QUE EL
BANCO NO PUEDE EFECTUAR ESA OPERACIÓN. RECIENTEMENTE UNA VISIÓN
VISITO EPM Y CONOCÍO DEL AVANCE DE LA PREPARACIÓN DEL PROYECTO
PROPUESTO Y DE ALGUNOS ASUNTOS QUE REQUIEREN SOLUCIONARSE, A
LOS QUE NO REFERIREMOS POR CARTA EN BREVE. ESPERAMOS
CONOCERLE PERSONALMENTE Y CONVÉRSAR SOBRE ESTOS ASUNTOS EN
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DATE: 9-20-82


CÓRED BY: V. OTTMANN
AUTORIZE BY: R. Costa, Chief, LCPUS

CLEMANCE AND COPY DISTRIBUTION:
Linares, LCPUS; Lecuona, LCPUS

LAC Projects
COLOMBIA
BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

Description of Services in the Project Area

Location: Barranquilla, located on Magdalena River about 10 km downstream of confluence with Atlantic Ocean.


WATER SUPPLY

Water Source: Rio Magdalena

Basic Parameters:
- Current service level about 51%; about 84,000 connections (79,000 domestic and 5,000 commercial/industrial); only 33,000 connections (40%) are metered; water rationing is widespread affecting about 50% of customers with service; unaccounted-for water is high with about 635, mainly caused by: illegal connections (15,000), low degree of metering, underestimated billing of unmetered connections, physical leakage.
- Poor, many valves and hydrants are inoperative; problems with pressure regulation, deficient operation of water treatment plant; no source metering.

Demand: Production needs of about 6 m³/s projected for 1990 (Attachment 1) assuming 95% coverage (70% through house connections and 25% through public standpipes) and reduction of unaccounted-for water to 25%.
Production
Existing capacity (Plants 1, 2, 3) 4.1 m³/s
Plant 4 (under construction) 1.0 m³/s
Total Available 1983 5.1 m³/s
Plant 5 (under consideration) 1.3 m³/s
Total available 1986/87 6.4 m³/s

Transmission, Storage, Distribution
Deficient, expansions are needed

SEWERAGE
Service Level
About 60% of population connected, poor
neighborhoods in southwestern Barranquilla not
connected.

Environmental Pollution
No sewage treatment in Barranquilla; not yet
critical because of large flows in Magdalena River;
overflow of sewage onto streets because of
insufficient collector capacity; severe pollution
in water courses adjacent to Magdalena River.

Maintenance and Operation
No maintenance to speak of; infiltration/inflow
problems; deposits in sewer lines.

STORM DRAINAGE
No piped storm drainage system; storm runoff is via
streets and some open canals; rains cause severe
street flooding in many areas, particularly
downtown, paralyzing traffic for hours; maintenance
of existing storm water canals deficient; storm
drains receive overflow of sewage from overloaded
collectors.

SOLID WASTE
Collection inefficient because of lack of equipment
and poor organization; much illegal dumping of
waste in vacant spaces; disposal method is
uncontrolled dumping.
### Proposed Barranquilla Water Supply and Sewage Project

**Empresas Públicas Municipales de Barranquilla**

**Water Demand Projections for 1982-1990**

<table>
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<td>1,157</td>
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<td>By House-Connections (%)</td>
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<td>Unit Consumption (mm^3/minute)</td>
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</table>

5/ 800 people served per standpipe using 30 L/d/day.

b/ Plant A.
c/ Plant J.
COLOMBIA
BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

Institutional Assessment

Potential Borrower: Empresas Publicas Municipales de Barranquilla (EPMB)

Overall Assessment: Weak; need for much improvement; extensive technical assistance required.

Institutional: Autonomous municipal company, providing following services: water and sewerage, solid waste collection and disposal, street paving, maintenance of marketplaces, slaughterhouse, municipal park, zoological garden; General Manager appointed by Mayor of Barranquilla; seven-member Board including Mayor of Barranquilla, two members nominated by the President of the Republic, one member nominated by Comité Interregional del Atlántico (Trade Group), three members nominated by City Council; EPMB operates in highly politicized environment (local politicians, interest groups); combination of services makes efficient management of EPMB a difficult task; separation of services being considered.

Organization: Several improvements possible to rationalize chain of dependencies; too much reliance on General Manager for decision-making.

Management: Young, crew of managers with talent and good will but limited experience having difficulties to cope with difficult situation and outside political interference; management team is being replaced.

Personnel: Total staff of some 2,000 employees; shortage of qualified professional staff on all levels; employee/1000 connection ratio difficult to determine as staff work not clearly separated by service, estimated to be around 8, is high; labor problems, unions are strong and restrict dismissal of staff.
Planning and Budgeting
No long-term planning to speak of; budget compliance reports are not used and delays in preparation limit their value as tool for decision-making; budget and accounting poorly coordinated.

Accounting
Very deficient; partially computerized; chart of accounts does not classify assets and liabilities separately by service; no separate balance sheets by service are prepared.

Fixed Assets
Individual records of fixed assets kept only for those acquired since 1978; inventory of fixed assets required.

Auditing
External auditing is done annually by private firms in compliance with requirements under Loan 1072-CO; internal audit inefficient.

Training
Some training being done without much success.

Metering
Only 40% of connections metered; no adequate meter repair and maintenance facilities;

Billing
Computerized; one month from meter reading to bill delivery; water and sewerage and solid waste are billed jointly; bills can be paid at EPMB headquarters and banks.

Customers File
Incomplete; users survey needed; many duplicates and nonexistent accounts; general clean up of customers file required.

Collections
Partial payments of bills are credited to water, sewerage and solid waste accounts in that order leading to distorted collection record, only consolidated accounts receivable equivalent to 7.5 months of billing; inspite of effort by EPMB, collection of overdue account has had only marginal success since control of illegal reconnecting difficult.

Engineering
Very limited in-house capacity; EPMB relies on consultants.

Operation and Maintenance
Very poor because of lack of equipment, personnel and funds, but mostly attitude problems.
COLOMBIA
BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT
EPMB's Current and Prospective Financial Position

Source of Revenues

Revenues from tariffs (water and sewerage, solid waste) and a portion of real estate taxes which EPMB collects on behalf of the Municipality; consumer contributions (valorization) are legally possible but EPMB has not used it to recover investments.

Consolidated Results

EPMB's financial position is critical; net income for all services combined was Col$124 million in 1981 and is projected to be Col$100 million in 1982; in 1981, as in previous years, deficits in services other than water supply and sewerage were met by subsidies from water and sewerage, real state tax revenues (Col$189 million in 1981), and in 1982 the sale of assets (Col$88 million); for 1982, same pattern as in 1981 is projected; inability of collecting bills (overdue accounts are equivalent to 7-5 months of 1981 billings) has created critical cash situation, estimated shortage of cash for 1982 is about Col$600 million; EPMB is hanging on by delaying payments to suppliers and ad-hoc emergency cash management.

Water Supply and Sewerage

Generated net income of Col$200 million in 1981, expected net income projected for 1982 is Col$330 million; rate of return on estimated revalued fixed assets was 1% in 1981, expected 1.1% for 1982; average tariff is about Col$11/m² for water and sewerage, similar to tariffs in other large Colombian cities; sewerage charge is 50% of water bill; tariff levels are increased automatically by 2% monthly; authorization for automatic increase runs out in December 1982; tariff structure judged to need improvement (higher progressivity and higher consumption rates for unmetered connections).
In the past, this service has been a major drain on EPMB’s finances; loss of Co1230 million in 1981; in spite of 150% tariff increase effective April 1982, losses of Co1230 million are projected for 1982; reason for continued poor financial performance is disproportionate growth of operating costs; estimated accumulated deficit about Co11000 million.

Marketplaces

Incurred operating loss of Co112 million in 1981; EPMB opened new market facility in July 1982; decision whether to sell or to maintain in EPMB not yet made.

Street Paving

Incurred operating loss of Co144 million in 1981; since 1981, EPMB is no longer responsible for street paving, but executed works using existing materials and personnel; will discontinue providing this service;

Slaughterhouse

Service has been leased; fee in 1981 was Co13 million.

Municipal Zoo

No income; costs were Co129 million in 1981.

Park Maintenance

No income; costs were Co120 million in 1981.

Outlook

Drastic measures are necessary to restore EPMB’s financial viability in preparation of the proposed project. Most important measures include:

- tariff adjustment for water and sewerage services (para. 6.06);

- discontinuation of subsidies from water supply and sewerage services to other services and definition of financing mechanisms for each service including the origin of funds to meet operating losses;

- reduction of accounts receivable to four months of billings by the end of 1983.
Oxloot (cont.) Preliminary financial projections (project file) show that successful implementation of above measures would restore viability to water and sewerage services by the end of 1983 and would allow EPWB to generate counterpart funds required for proposed water and sewerage component.

To restore financial health to solid waste will be more difficult, since current tariff levels are already high. This service in all likelihood would remain deficitary, and in all probability require subsidies from municipal taxes, until operational improvement measures to be identified under the proposed project would succeed in reducing operating costs.
<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>Estimated 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water and Sewerage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenues</td>
<td>1,036</td>
<td>1,358</td>
</tr>
<tr>
<td>Total expenses</td>
<td>835</td>
<td>1,025</td>
</tr>
<tr>
<td>Income (Loss)</td>
<td>201</td>
<td>333</td>
</tr>
<tr>
<td><strong>Solid Waste</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenues</td>
<td>140</td>
<td>260</td>
</tr>
<tr>
<td>Total expenses</td>
<td>270</td>
<td>490</td>
</tr>
<tr>
<td>Income (Loss)</td>
<td>(230)</td>
<td>(230)</td>
</tr>
<tr>
<td><strong>Other Services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenues 3/</td>
<td>314</td>
<td>210</td>
</tr>
<tr>
<td>Total expenses</td>
<td>161</td>
<td>200</td>
</tr>
<tr>
<td>Income (Loss)</td>
<td>153</td>
<td>19</td>
</tr>
<tr>
<td><strong>Consolidated</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td>1,490</td>
<td>1,837</td>
</tr>
<tr>
<td>Total expenses</td>
<td>1,366</td>
<td>1,735</td>
</tr>
<tr>
<td>Income (Loss)</td>
<td>124</td>
<td>102</td>
</tr>
</tbody>
</table>

1/ Based on EPM's financial statements.
2/ Based on March statements of operations, and first quarter budget compliance report. Collection losses are estimated at 10% of billings.
3/ Included in 1981: Col$189 million from real estate taxes; Col$88 million from the sale of an asset. Tax income in 1982, Col$200 million.
### Tentative Balance Sheets - 1981
(Millions of Col$)

<table>
<thead>
<tr>
<th>Water and Sewage</th>
<th>As Estimated from Records</th>
<th>As Adjusted 1/</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed assets</td>
<td>1,448</td>
<td>1,448</td>
</tr>
<tr>
<td>Current assets</td>
<td>617</td>
<td>374</td>
</tr>
<tr>
<td>Receivables</td>
<td>486</td>
<td>243</td>
</tr>
<tr>
<td>Other assets</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td>Other services (due from)</td>
<td>526</td>
<td>526</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>2,656</td>
<td>2,414</td>
</tr>
<tr>
<td><strong>Liabilities and Capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>360</td>
<td>360</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>769</td>
<td>769</td>
</tr>
<tr>
<td>Other Liabilities</td>
<td>247</td>
<td>247</td>
</tr>
<tr>
<td>Paid-in capital</td>
<td>381</td>
<td>381</td>
</tr>
<tr>
<td>Superavit (deficit)</td>
<td>899</td>
<td>656</td>
</tr>
<tr>
<td><strong>Net assets</strong></td>
<td>1,280</td>
<td>1,037</td>
</tr>
</tbody>
</table>

### Solid Waste

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Current assets</td>
<td>176</td>
<td>110</td>
</tr>
<tr>
<td>Receivables</td>
<td>132</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>277</td>
<td>211</td>
</tr>
</tbody>
</table>

### Consolidated (includes other services)

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>1,606</td>
<td>1,606</td>
</tr>
<tr>
<td>Current assets</td>
<td>1,443</td>
<td>868</td>
</tr>
<tr>
<td>Receivables</td>
<td>1,077</td>
<td>502</td>
</tr>
<tr>
<td>Other assets</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>3,272</td>
<td>2,697</td>
</tr>
</tbody>
</table>

### Liabilities and Capital

|                           |               |
| Current liabilities       |               |
| Long-term liabilities     |               |
| Other Liabilities         | 128          |
| Other Services (due to)   | 1,087        |
| **Net Assets and Deficit** | (938)       | (1,004)      |

1/ Reconciles receivables and net income.
## COLONIA

### BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

#### EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA

**Collection Experience**

(Millions of Col$)

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>1981</th>
<th>1982 (6 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>392</td>
<td>633</td>
<td>383</td>
</tr>
<tr>
<td>Collections</td>
<td>384</td>
<td>546</td>
<td>319</td>
</tr>
<tr>
<td>% Collected</td>
<td>98%</td>
<td>86%</td>
<td>83%</td>
</tr>
<tr>
<td><strong>Sewerage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>125</td>
<td>261</td>
<td>169</td>
</tr>
<tr>
<td>Collections</td>
<td>78</td>
<td>163</td>
<td>88</td>
</tr>
<tr>
<td>% Collected</td>
<td>62%</td>
<td>62%</td>
<td>52%</td>
</tr>
<tr>
<td><strong>Garbage Disposal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>86</td>
<td>116</td>
<td>109</td>
</tr>
<tr>
<td>Collections</td>
<td>55</td>
<td>76</td>
<td>50</td>
</tr>
<tr>
<td>% Collected</td>
<td>64%</td>
<td>66%</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Real Estate Taxes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>167</td>
<td>189</td>
<td>100</td>
</tr>
<tr>
<td>Collections</td>
<td>156</td>
<td>145</td>
<td>109</td>
</tr>
<tr>
<td>% Collected</td>
<td>93%</td>
<td>78%</td>
<td>109%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billings</td>
<td>770</td>
<td>1,199</td>
<td>761</td>
</tr>
<tr>
<td>Collections</td>
<td>673</td>
<td>930</td>
<td>566</td>
</tr>
<tr>
<td>% Collected</td>
<td>87%</td>
<td>78%</td>
<td>74%</td>
</tr>
<tr>
<td>Categories</td>
<td>Cadastral Values</td>
<td>Basic Allowance m³/month</td>
<td>Fixed Charge $/month</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td>--------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>1</td>
<td>0 to 10,000</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>10,000 to 25,000</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>25,000 to 50,000</td>
<td>20</td>
<td>85</td>
</tr>
<tr>
<td>4</td>
<td>50,000 to 100,000</td>
<td>20</td>
<td>135</td>
</tr>
<tr>
<td>5</td>
<td>100,000 to 200,000</td>
<td>20</td>
<td>190</td>
</tr>
<tr>
<td>6</td>
<td>200,000 to 500,000</td>
<td>20</td>
<td>220</td>
</tr>
<tr>
<td>7</td>
<td>More than 500,000</td>
<td>20</td>
<td>230</td>
</tr>
</tbody>
</table>

**Commercial**  
Co$150 + Co$0.8/m³  
500

**Industrial**  
Co$150 + Co$0.8/m³  
1,000

**Official**  
Co$50 + Co$0.6/m³  
400

*Average 50% of Water Tariff*

*2% Monthly Increment (authorized and implemented until December 31, 1982)*
DRAFT LETTER

Mr. Rodolfo Amaya  
General Manager  
Empresas Publicas Municipales de Barranquilla (EPMB)  
Calle 32, No. 44-46  
Barranquilla, Colombia

RE: Proposed Barranquilla Water Supply and Sewerage Project

Dear Mr. Amaya:

The purpose of this letter is to inform you of the Bank's position on the proposed project based on the findings of a Bank mission which visited Barranquilla in July/August 1982.

This mission confirmed that EPMB's present financial and institutional capacity is not sufficient to carry out even the limited investment program which would be required to meet basic needs for municipal services in Barranquilla. EPMB's deficient operational capabilities are exemplified best by its poor performance under Loan 1072-CO through INSPFAL, its unacceptably high rate of 43% for unaccounted-for water and its critical financial position characterized by an anticipated cash deficit of about Col$600 million in 1982, the need for water supply and sewerage services subsidizing other services and the high level of uncollected accounts equivalent to about 7.5 months of annual billings. Nevertheless, considering the desperate need for service
Improvements in Barranquilla and our belief that most of EPMB’s shortcomings could be overcome through the determined combined efforts of EPMB’s management and municipal authorities, the Bank remains prepared to assist EPMB in carrying out a water supply and environmental improvement project.

The Bank feels that the most important component of such a project would be a comprehensive institutional development and improvement program with the objective to restore EPMB’s financial, managerial, administrative and operational strength. We also believe that EPMB’s present limited capacity would call for an investment program restricted to the most critical and urgent works in water supply, sewerage, storm drainage and solid waste management.

In water supply, these works should primarily aim at relieving water rationing, providing rudimentary services to Barranquilla’s unserved poor (standpipes) and at reducing the rate of unaccounted-for water to acceptable levels (metering). In sewerage, the main emphasis should be on the rehabilitation of existing systems and the expansion of additional collector capacity where overflow of sewage creates critical public health problems. Regarding storm drainage, investments should be limited to the most urgent needs in downtown Barranquilla. The main objective of the solid waste component would be to improve collection efficiency and to initiate controlled disposal practices.
The Bank's mission has determined that realizing the objectives outlined above would require an investment of around US$60 million (including contingencies). The Bank would contribute 35% to 40% of the total project cost. The remaining funds would have to come primarily from ENPB's internal cash generation and other local sources. Should the measures and conditions described below and in the Attachment be met in a timely fashion, we could appraise the proposed project in April 1983, which implies that project execution could get under way in early 1984. ENPB would, thus, have more than one year to prepare itself for the project.

The minimum improvement measures, which we would expect ENPB to carry out before the end of 1983, would aim at restoring the profitability of water supply and sewerage services to guarantee the availability of sufficient counterpart funds for the project and the discontinuation of all subsidies from water and sewerage services to other services and the establishment of adequate financing mechanisms for each service, such as the setting of tariffs and taxes to cover as a minimum operating costs and debt service payments.

As a first step towards reaching these goals, the Bank would require that ENPB raise its water tariffs by 30%, as of January 1, 1983 and continue monthly increases of 2% thereafter, and adjust the present tariff structure by introducing a higher progressivity and increasing charges to unmetered connections. In addition, accounts receivable should be reduced gradually from their present level of 7.5 months of billings to 4 months of billings by the end of 1983.
All measures and actions to be taken by EPMB before and as a condition of appraisal are summarized in the Attachment.

We would appreciate very much to learn your view on the issues raised in this letter. Since we won't be able to send another mission to Barranquilla before December 1982, your visit to Bank headquarters in Washington would be most helpful.

For their interest in the proposed project, we have copied this letter to the Mayor of Barranquilla and the Director of Departamento de Planeacion Nacional.

Sincerely yours,

Rene Costa
Division Chief
Water Supply and Sewerage Division
Latin America and Caribbean Region

cc: Mayor
Barranquilla, Colombia

Director
Departamento de Planeacion Nacional

To be Cleared with and cc: Messrs. Wossels, LCPDR and Lecuona, LCDB
COLOMBIA

BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

Measures and Actions To Be Taken By EPMB Before Appraisal

A. Project Preparation

1. For the water supply and sewerage component, completion of technical, financial and economic feasibility studies to the satisfaction of the Bank and completion of about 50% of the final design work.

2. For the storm drainage component, completion of feasibility study for the storm drains to be included into the proposed study, including preliminary designs and updated cost estimates.

3. For the solid waste component, completion of feasibility study for sanitary landfill, including conceptual design, need for equipment and cost estimate.

4. For FY82 and for each of EPMB's services, availability of: (a) estimated balance sheet; (b) estimated revaluation of fixed assets and depreciation; and (c) estimated allocation of expenses. This information should be prepared by qualified consultants, possibly within the scope of the external audit for 1982.

B. Improvement of EPMB's Financial Performance

1. Water tariff adjustments to be implemented, as of January 1, 1983, including:

   (a) 30% increase in average tariff;

   (b) monthly tariff increases of 2% throughout 1983;

   (c) adjustments in tariff structure satisfactory to the Bank by introducing increased progressivity and increase in water use estimates for unmetered consumption.
ANNEX 5
Attachment 1

2. By November 30, 1982, presentation of a plan, satisfactory to the Bank, outlining EPMB's strategy for reducing accounts receivable to 4 months of billings equivalent by the end of 1983. The strategy should include monthly collection targets. Compliance with these targets would be a condition for appraisal.

3. By December 31, 1982, presentation of a plan of action, satisfactory to the Bank, for discontinuing any subsidies from water supply and sewerage to other services by the end of 1983. For each service, the plan should present satisfactory financial projections and statements on the origin of revenues (tariffs, taxes, subsidies) required to meet operating costs and debt service.

C. Project Financing

1. Presentation of separate financing plans, specifying the origin of counterpart funds for the water supply and sewerage, storm drainage and solid waste components.

2. Assurance of availability of financing for Plant No. 5 or EPMB's consent to reexamine strategy for increase in water production capacity with the objective of finding an alternative acceptable solution to be financed under the Bank project.

D. Operational Improvements

1. Calibration of production meter at water treatment plant.

2. A plan satisfactory to the Bank to extend meter coverage to high water users, mostly industrial and commercial, by the end of 1983.
EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA, BARRANQUILLA, COLOMBIA. DIRIGIDO A RODOLFO AMAYA, GERENTE GENERAL. EN PRIMER LUGAR LE FELICITAMOS POR SU NOMBREMIENTO COMO GERENTE GENERAL DE EPMB. EL BANCO DESEA CONTINUAR EL ESFUERZO CONJUNTO CON EPMB PARA LLEVAR ADELANTE UN PROYECTO DE AGUA Y ALCAÑIZADO EN BARRANQUILLA. EN ESTE MOMENTO CONSIDERAMOS DE SUMA IMPORTANCIA Y URGENCIA LA CONTINUIDAD DE LA PREPARACION DEL ESTUDIO DE FACTIBILIDAD Y DISEÑOS. CON RELACION A LA SOLICITUD DE GARANTIA EXPRESADA EN TELEX DE EPMB DEL SEPTIEMBRE 6, 1982 LE MANIFESTAMOS QUE EL BANCO NO PUEDE EFECTUAR ESA OPERACION. RECENTIEMENTE UNA MISION VISITO EPMB Y CONOCIO DEL AVANCE DE LA PREPARACION DEL PROYECTO PROPUESTO Y DE ALGUNOS ASUNTOS QUE REQUIEREN SOLUCIONARSE, A LOS QUE NOS REFERIREMOS POR CARTA EN BREVE. ESPERAMOS CONOCERLE PERSONALMENTE Y CONVERSAR SOBRE ESTOS ASUNTOS EN NUESTRA PROXIMA VISITA FIJADA TENTATIVAMENTE PARA NOVIEMBRE.
Cordialmente, COSTA INTBAFRAD

NOT TO BE TRANSMITTED

CLASS OF SERVICE: CABLE
TELEX NO.: 
DATE: 9-20-82


CLEARED: Linares; LCWP; Lecuona; LC2
cc: 

AUTHORIZED BY: R. Costa, Chief, LCWP

DEPARTMENT: LAC Projects

CHECKED FOR USE OF CABLE SECTION: (Signature)}
THE NAMES OF THE AUTHORITIES OF THE NEW ADMINISTRATION
IN BARRANQUILLA ARE AS FOLLOW:

GOBERNOR - ABEL CARBONELL
MAYOR - ERNESTO SUAREZ
GERENTE (EMP. M.) RODOLFO ANAYA

EVEN THOUGH WE EXPLAIN THE MASTER PLAN, WE ARE NOT SURE
THEY UNDERSTAND THE CONSEQUENCES OF NONCONTINUING IN
FULL SPEED THE STUDY. WE TOLD THEM THAT ANY DELAY IN THE
PROCESS OF THE PREPARATION OF THE FEASIBILITY STUDIES
WILL UPSET THE TIME TABLE FOR THE LOAN-WE HOPE THEY DO NOT
TAKE US LIGHTLY SINCE WE ARE THE CONSULTANTS-AS YOU KNOW
THE UNIQUE SITUATION HERE IN BARRANQUILLA, WE RESPECTFULLY
SUGGEST FOR THE BANK TO COMMUNICATE TO THE TIME TABLE OF
THE LOAN, AS SOON AS POSSIBLE.

SINCERELY YOURS

MAX STONER
INGENIERO GLACE AND GLACE

P.S. I CALLED YOU YESTERDAY

33448 PRADO CD

MMMM
164112 1523 090982 03650057 1519
01890189 306
NNNH
Baranquilla, 8 de septiembre de 1982
No. GER - 60288

Ing.) WALTER STOTTMANN
Banco Internacional de Reconstrucción y Fomento
WASHINGTON D.C.

Aprecado Walter:

Adjunto encontrarás el proyecto de Acuerdo Metropolitano preparado por la Gerencia de las Empresas Públicas Municipales sobre la creación de la Empresa Metropolitana de Acueducto y Alcantarillado —Metrosagua—. También te envío fotocopia de la carta dirigida al doctor Múñoz Pérez en su condición de Alcalde.

Te comento que esta idea ha tenido mucha aceptación, por lo menos entre los miembros del actual gobierno. Este proyecto de Acuerdo, modificado, ya fue aprobado por la Junta Metropolitana, entidad mixta del Área Metropolitana. Ahora se requiere que sea aprobado por los diferentes Concejos de los municipios asociados. La celeridad con que se nueva de ahora en adelante corresponde a los nuevos Gobernador del Departamento y Alcalde de la ciudad.

Personalmente te ratifico lo conversado personalmente en la ciudad de Bogotá, en el sentido de que estoy convencido de que ésta es una fórmula o solución adecuada para arreglar el problema financiero de las Empresas Públicas Municipales, además de prestar un buen servicio en el Área. Quizás tenga aceptación entre los miembros del nuevo gobierno. También estoy convencido de que la opinión del Banco Mundial será importante para el desarrollo que tenga esta idea en el futuro.

Aprovecho la oportunidad para informarte que ha sido nombrado nuevo gerente de las Empresas Públicas al Ingeniero Rodolfo Ana ya Eultrano, persona a quien considero muy capacitada para desempeñar el cargo.
setiembre 82 No. GER -

Ingieniero
Walter Stottmann
Washington D.C. 002383

Por último quiero agradecer sinceramente toda la deferencia que tanto tu como los doctores Costa, Linera y Guzmán, tuvieron para conmigo durante el periodo en que me encontré trabajando en las Empresas Públicas Municipales de Barranquilla.

ALEX BLANCO ABELLO
GERENTE GENERAL

Anexo: Lo anotado
ABA/eva.
Señor doctor
RAUL MOSERES PEREZ
Alcalde Metropolitano
Barranquilla

Estimado Señor: en sus recomendaciones de una pasada reunión de Junta Directiva me gustaría acompañarlo a la presente con el Proyecto de Acueducto Metropolitano por medio del cual se crea la Empresa Metropolitana de Acueducto y Alcantarillado - Metroagüas.

La creación del área metropolitana es producto de la necesidad de racionalizar la prestación de los servicios públicos entre municipios cercanos. En el caso de Barranquilla, con Soledad, Mía- la y Puerto Colombia como municipios asociados, es una necesidad imperiosa. Esta se citar el ejemplo de los vertimientos de aguas servidas del Municipio de Soledad prácticamente en la basóterna del Acueducto de Barranquilla. En cuanto a Acueducto se refiere encontremos al Puerto Colombia suministrarán de agua a barrios del norte del Municipio de Barranquilla. Estos son casos reales de la situación actual que nos demuestran la falta de coordinación en la prestación de estos servicios dentro del área y la necesidad urgente de crear un organismo coordinador.

Consideramos que la situación actual de Acueducto y Alcantarillado en los municipios asociados en el área metropolitana es deficitaria en cuanto a cubrimiento y calidad. Sin embargo, se está desarrollando un proyecto que nos hace pensar que dicha situación cambiará radicalmente en un futuro muy cercano. Nada fortalecería más la adecuada prestación de servicios mencionados que el agruparse, dentro de una gran organización, a tiempo, o un trabajo, tienen que ver con la prestación de estos servicios en el Área. De ahí la importancia de esta Gerencia...
sobre la creación de la empresa que deba asumir tal actividad.

Es indudable que el pilar fundamental dentro de esta nueva organización corresponde a las instalaciones que las Empresas Públicas Municipales de Barranquilla deben asimilar, correspondiendo a acueducto y alcantarillado, que prestan actualmente los servicios de Acueducto y Alcantarillado. Después de estudiar detenidamente la situación hemos llegado a la conclusión de que para la ciudad de Barranquilla es conveniente extrar la prestación de los servicios de acueducto y alcantarillado de las actuales Empresas Públicas Municipales. Es conocido que durante los últimos dos años (1982) ambos servicios, por las causas señaladas en los servicios, no son sostenidos con efectivo, lo que nos lleva a la conclusión de que estas empresas están perdiendo dinero.

Sin embargo, esta situación no debe y no puede sostenerse habida cuenta de los proyectos de ensanche realizados o en proceso de realización. Es necesario que el flujo de fondos positivo de dichos servicios se oriente hacia la inversión en los proyectos de desarrollo y hacia el aporte de los servicios de la deuda para los proyectos desarrollados. De no adoptarse esta medida inmediatamente se presentarían repercusiones graves dentro del sector de inversión y en los gastos de operación, pudiéndose llegar a la parálisis total de las Empresas Públicas.

Ante estos dos importantes factores es que se ha concebido la creación de la Empresa Metropolitana de Acueducto y Alcantarillado como una empresa autónoma, descentralizada, con personería jurídica y patrimonio propio. Los ingresos de esta ente corresponden a aquellas tarifas que actualmente cobran las Empresas Públicas Municipales de Barranquilla y la Empresa de Obras Sanitarias del Atlántico, y su patrimonio será el aporte de los bienes afectados a la prestación de dichos servicios por parte del Municipio de Barranquilla a través de Empresas Públicas Municipales y de los municipios...
Agosto 24/86 - No. 002192

Empresas Públicas Municipales

BARRANQUILLA - COLOMBIA

Hoja 3

Nuestros asesores legales nos han recomendado como forma procedimental la creación primero de Metroaguas por parte de la Junta Metropolitana por medio de acuerdo, con su reglamentación por Decreto del Alcalde Metropolitano. Posteriormente los diferentes Concejos Municipales deberán aprobar mediante acuerdo la vinculación de los patrimonios municipales a estas Empresas, para que pueda debidamente estructurarse y pueda atender los servicios a ella encomendados.

Creemos sinceramente, señor Alcalde Metropolitano, que en esta forma se ha diseñado una solución definitiva a la prestación de estos servicios básicos dentro del Área y el mismo tiempo modificado en forma sustancial la estructura financiera de las Empresas Públicas Municipales de Barranquilla, con el fin de evitarle cualquier paralización futura por este concepto, el cual lógicamente repercutirá en el normal desarrollo de la ciudad de Barranquilla y de su Área Metropolitana.

ALEX BLANCO ABELLO
GERENTE GENERAL

ABA/eva.
URGENS CONOCER POSIBILIDAD DE QUE BANCO MUNDIAL AVALLE O GARANTICE
PRESTAMO OBTENIDO BANCO COMERCIAL POR APROXIMADAMENTE DOLARES UN
MILLON CON EL SIGUIENTE DESTINO ESPECIFICO:
1- FINANCIAR COSTOS CONSULTORIA PLAN MAESTRO, ESTUDIOS FACTIBILIDAD
Y DISEÑOS DEFINITIVOS.
2- IMPLANTAR INMEDIANTAMENTE PLAN MEDIDORES CON ENFASIS EN LA MEDICION
INDUSTRIAL Y COMERCIAL.
EN CASO POSITIVO FAVOR INFORMARNOS LA MECANICA A UTILIZAR, MENOS
ADELANTADO CONVERSACIONES CON BANCO COMERCIAL Y SE MUESTRA INTERESE-
DO.
Cordial saludo
ALEJ BLANCO ASEDE
GERENTE REPUBLICAS BARRANQUILLA
en
WORLD BANK 440099
33431 CAPRA CO
INFORMO QUE EMPRESAS PÚBLICAS ESTÁ MUY INTERESADA EN DESARROLLAR PRONTO OPORTUNO ESTUDIO A CARGO FIRMA GLACE AND GLACE PUNTO HARENOS ESFUER
ZOS FUTUROS PAGOS A DICHA FIRMA SEAN PUNTUALES PUNTO POR OTRO LADO INFORMO QUE SITUACIÓN NOY ALGO IRREGULAR DESDE PUNTO DE VISTA JURÍDICO POR CUANTO NUESTROS ABOGADOS LES HAN SOLICITADO CONSTITUCIÓN Y REGISTRO SU EMPRESA EN COLOMBIA TAL COMO EXIGEN LEYES COLOMBIANAS Y DIOSELE PLAZO NOVENTA DÍAS PARA DICHO REGISTRO EL CUAL NO HA SIDO CUMPLIDO POR ELLOS PUNTO.

ATENTAMENTE
ALEX BLANCO AVELLO
GERENTE EMPRESAS PÚBLICAS
BARRANQUILLA

©
WORLD BANK 440098
33431 CAMRA CO...

NOT TO BE TRANSMITTED

CLASS OF SERVICE: TELEX No.: DATE: July 14, 1982
SUBJECT: Proposed Barran. WS and S. Project DRIFTED BY: WStottmann
CLEANED AND COPY DISTRIBUTION: cc:Messrs. Leucena, LC208; Costa (o/r), G. Yepes, Acting Chief, LCPW, Linares, LCPWS
AUTHORIZED BY (Name and Signature)
DEPARTMENT: LCP
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DISTRIBUTION: WHITE: Reo Copy WHITE: Transmitted Copy CAYMAN: Std Copy BLUE: Odivision In Use
MS. GRACIELA VILLA LEMUS, GENERAL MANAGER,
EMPRESAS MUNICIPALES DE CUCUTA, APARTADO AEREO 521, CUCUTA,
COLOMBIA. WE HAVE REVIEWED PROPOSALS BY CAMILO SILVA LTDA. FOR
SEWERAGE STUDY AND BY HIBROSAN LTDA. AND J. NINO AND ILAM LTDA.
FOR RIO ZULIA STUDY AND ARE IN AGREEMENT WITH RESULTS OF
EVALUATION OF EM CUCUTA SELECTION COMMITTEE. BANK MISSION
CONSISTING MR. WALTER STOTTMANN TENTATIVELY SCHEDULED FOR ARRIVAL
CUCUTA JULY 23 OR JULY 30 WITH OBJECTIVE DISCUSSION PROJECT
PREPARATION AND EVALUATION IMPACT SEWERAGE PROJECT ON WATER
QUALITY RIO ZULIA. REGARDS COSTA INTBAFRAID

NOT TO BE TRANSMITTED

CLASS OF SERVICE: CABLE
TELENO: 72485
SUBJECT: CO-2-126 Cucuta Water Supply
CLEARRANCE AND COPY DISTRIBUTION:
cc: Linares, LCPWS; Lecuona, LC2DD
AUTHORIZED BY: Rene Costa, DC, LCPWS
DEPARTMENT: LAC Projects
DATE: 7-2-82
DRAFTED BY: WStottmann
CHECKED FOR DISPATCH: K
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BLUE - Originator to Keep
Mr. Stettman

attached in the letter we discussed on Thursday, June 10.

JG

LPWWS
Date Revd. 6/15/82
Log No. 20-2-111
To
Action/Date 0/12
Doctor

ROBERTO PACCHINI SOLANO
Gobernador del Departamento
E. S. D.

Muy respetado Sr. Gobernador:

La presente tiene por objeto informarle la difícil situación en que se encuentra la Consultoría del Plan Maestro de Alcantarillado y Agua Potable para Barranquilla.

A pesar de la buena voluntad mostrada en todas ocasiones por el actual Gerente de las Empresas Públicas, nos encontramos una vez más en la situación de no tener liquidez en nuestra operación por moras de pagos de las empresas. Esta situación ha venido ocurriendo sistemáticamente y este es el momento en que se nos adeudan mensualidades desde Diciembre del año pasado.

Hemos venido recurriendo a prestamos bancarios que han resultado en costos muy altos no contemplados en nuestra propuesta económica original. Al momen to de escribirle esta carta, estamos debiendo sumas considerables de dinero a dos Bancos de Barranquilla. No es necesario decirle que no podremos continuar financiando el estudio por razones de costo, sino que además, los Bancos han rehusado de continuar extendiéndonos crédito.

En resumen, deseamos comunicarle que con verdadero desagrado hemos tomado la decisión de notificar a las Empresas Públicas Municipales que no podemos continuar nuestra labor de consultoría al menos que se haga un esfuerzo y se nos pague el dinero que se nos adeuda hasta el momento presente.
Esta situación se agrava aún más, por el hecho que la extensión del contrato se ha venido posponiendo y posponiendo sin aún saber nosotros, las razones de dicha postergación. A pesar de que nos hemos reunido con la Junta Directiva y su Comité en varias ocasiones, demostrando satisfactoriamente las razones de la extensión del contrato, y que se han obtenido las aprobaciones de las Empresas, de Fonade y del Banco Mundial y que además se han recibido recomendaciones evidentes de extender el contrato (Banco Mundial), aun hoy no hemos firmado el Otrosf del Contrato. Aun así, y sin el amparo legal de la extensión del contrato, nuestra organización ha mantenido todo su personal, nacional y extranjero en Barranquilla, esperando una definición de esta situación. Se puede decir que estamos en este estado desde Marzo 16, fecha en que se terminó el contrato original.

Estoy seguro que las Empresas Públicas han considerado seriamente las repercusiones de esta acción. Innumerables cartas, notas, conversaciones, telex, etc., entre el Gerente de las Empresas y nosotros, han puesto de presente la situación que hoy le estoy comunicando.

Hemos utilizado todos los medios de comunicación y persuasión para expresar nuestro problema. Hemos entendido muchas veces, que por razones económicas de las Empresas, varios de nuestros pagos en cheque han sido devueltos por el Banco por falta de fondos. Pero más que todo hemos tenido mucha paciencia.

A pesar de estos problemas, deseo que sepa que hemos tratado de hacer un estudio lo más seriamente posible y que este año de experiencia ha sido muy satisfactorio para nosotros, por cuanto hemos llegado a conocer a fondo los problemas de agua de la ciudad de Barranquilla y hemos querido dar una solución permanente y definitiva con la elaboración del Plan Maestro. Además, hemos creado un núcleo de Ingeniería Sanitaria con la colaboración del talento colombiano que va a ser de mucha importancia en el futuro de Barranquilla. Por estas razones y muchas otras de tipo sentimental hacia Barranquilla, nos ha sido difícil tomar esta decisión.

Espero que Ud. entienda esta carta como un último recurso de nuestra parte para que Ud., la máxima autoridad del Departamento, no solamente sea parti
Hoja No. 3

necesidad de esta decisión si no hay un camino a este problema.

Experdiendo antecesamente la consulta y solicitando nuestra posición de respeto y admiración, atentamente,

[Signature]

IVAN M. GLACE JR.
Presidente Glace & Glace Inc., Buchart-Horn, Inc.

C.C. Dr. Alex Bianco
Gerente General E.R.M.
Dr. José Joaquín Pérez
Contralor Municipal
Dra. Javier Carvajal
Secretaría de la Junta Directiva E.R.M.
Buchart-Horn, Inc.
Archivo.
May 25, 1982

Mr. Glace
Glace and Glace, Inc.
2771 Paxton Street
Harrisburg, Pa.

Dear Mr. Glace:

Re: Preparation of Proposed
Barranquilla Water Supply
and Sewerage Project

Attached we are sending some documentation prepared by the World Bank which may help you in the preparation of the Feasibility Study for the Barranquilla Project.

Per telex of May 14, 1982, we have informed Empresas Publicas Municipales de Barranquilla that the first draft of the water supply and sewerage master plan, prepared by your firm, is an acceptable basis for continued project preparation.

If you have any further questions regarding the future preparation of the project, please feel free to contact Mr. Walter Stottemann at telephone No. (202) 477-2485.

Sincerely,

Rene Costa
Chief
Water Supply and Sewerage Division
Latin America and Caribbean Region

Attachment

WS:
WS: Js

OFFICIAL FILE COPY
Bogotá, 21 de mayo de 1982

Doctor
GUILLERMO YEPES
Banco Mundial
Washington D.C.

REF: Envío documentos E, P, M, B. para estudio Adición U.S. $ 368, 000

Estimado doctor:

Adquinto a la presente enviamos documentos solicitados por el Banco Mundial relacionados con la adición de la referencia. Son éstos:

1. Estado de resultados del año 1981 por servicios y consolidado.
2. Balance a diciembre 31 de 1981 por servicios y consolidado.
3. Proyecciones financieras para 1982 por servicios y consolidado
4. Plan de acción para obtener una tasa de retorno por lo menos de 3% para 1982 con los servicios de Acueducto y alcantarillado.
5. Plan de acción para mejorar coeficiente de operación de otros servicios distintos de acueducto y alcantarillado.
6. Plan de acción para reducir el agua no contabilizada a 30% para fines de 1982.

Cordialmente,

GONZALO MEDINA SALAZAR
Subdirectora de Proyectos con Recursos Externos

Anexo.

C.I.S.
Mayo 3 de 1982
No. CONTAB.*

Doctor
GONZALO MEDINA SALAZAR
Subdirector de Proyectos
con Recursos Externos "Insfopal"
Bogotá, D.E.

REF: ADICION US $ 300,000 SUBPRESTAMO EXTERNO

Estimado Doctor:

Atendiendo lo solicitado por usted, mediante Oficio No. 1452 fechado
en Abril 21/82, me permito enviarle los documentos requeridos:

1o.-) Resultados financieros a Diciembre 31/81 de las Empresas para
cada uno de los servicios

2o.-) Cuadro de Proyecciones Financieras para todos los servicios -
 año 1982 e índices de operaciones

3o.-) Plan de acción de las Empresas para:

a) Reducir agua no contabilizada a un 30% para fines 1982

b) Reducir las cuentas vencidas para Acueducto y Alcantari-
llado a tres (3) meses de facturación, como también para
recuperar la cartera morosa del Impuesto Predial

4o.-) Formularios debidamente diligenciados para procesar las adequi-
siones de activos fijos de los años 1979, 1980 y 1981 en el
computador, con lo cual se obtendrá la información de "Reva-
luación de Activos", con lo que se determinará el coeficiente de
retorno.

***

ACUEDUCTO  *
ACANTARILLADO  *
ARBO  *
MERCADOS  *
NAVARRO  *

IMPUESTO PREDIAL  *
IMPUESTO DE VEHÍCULOS  *
PAVIMENTACIÓN  *
NOMENCLATURA  *
Con la seguridad de haberlo atendido en la información, me suscribo
cordialmente.

EDUARDO VERANO DE LA ROSA
Gerente Encargado

Incl: Documentos relacionados

C.C.: Subgerencia Financiera
   División Contabilidad
   Archivo y Corresp.
   Consecutivo

/daisy .-
MR. A. BLANCO, GENERAL MANAGER, EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA (EMPMB), CALLE 32, NO. 44-46, BARRANQUILLA, COLOMBIA. RE: PREPARATION PROPOSED BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT. (1) WE HAVE REVIEWED MASTER PLAN WATER SUPPLY AND SEWERAGE AND FOUND IT ACCEPTABLE AS BASIS FOR CONTINUATION PROJECT PREPARATION WITH FOLLOWING NEXT STEPS IN ACCORDANCE WITH OUR LETTER OF DECEMBER 24, 1981: (A) PREPARATION FEASIBILITY STUDY ON 1982-83 INVESTMENT PROGRAM AND EARLY STAGES THEREOF TO BE INCLUDED IN PROJECT PROPOSED FOR BANK FINANCING; AND (B) PREPARATION FINAL PROJECT DESIGNS. (2) SUGGEST TARGETS COMPLETION FIRST DRAFT FEASIBILITY STUDY AS FOLLOWS: TECHNICAL CONTENT (PROPOSED INVESTMENT PROGRAM WITH DETAILED COST ESTIMATES) BY JULY 15, 1982; INSTITUTIONAL/FINANCIAL/SOCIO-ECONOMIC ASPECTS SEPTEMBER 1982. FINAL DESIGNS FOR 50% OF PROJECT WORKS SHOULD BE COMPLETED BY END 1982 WITH VIEW BANK APPRAISAL MISSION EARLY 1983. (3) REGARDING TREATMENT PLANT NO. 5 BANK RECOMMENDS THAT CONSULTANTS BE DIRECTED TO COORDINATE WITH DEPARTMENT DESIGN OF PLANT AND FORTHCOMING PROJECT WITH OBJECTIVE OPTIMAL INTEGRATION OF PLANT 5 INTO OVERALL EMPMB WATER TREATMENT SCHEME. (4) FOR PREPARATION POSSIBLE GARBAGE COLLECTION/DISPOSAL PROJECT COMPONENT, /c

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CLASS OF SERVICE: CABLE
TELEX NO.: Date: 5-14-82
SUBJECT: Barranquilla Water Supply Proj.
DRAFTED BY: WSTOTMANUS
Cleared with & ccc Mr. Leuconoe, LCP/D
cc: Messrs. Vessels, LCPS; Sokol, LCPS
GUZMAN, LCPS

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CABINET - LCPS

DEPARTMENT: LCP
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WE RECOMMEND PREPARATION OF SECTOR STUDY BY CONSULTANTS TAKING INTO ACCOUNT PRESENT AND FUTURE TECHNICAL, INSTITUTIONAL AND FINANCIAL ASPECTS. PLEASE SEND DRAFT TERMS OF REFERENCE BY JUNE 30, 1982. (5) BANK MISSION CONSISTING MESSRS. W. STOTTMANN (ENGINEER) AND J. LINARES (FINANCIAL ANALYST) SCHEDULED TO VISIT EPMB JULY 1982 WITH OBJECTIVE: (A) REVIEW OVERALL 1982-90 INVESTMENT PROGRAM AND PROPOSED PROJECT; (B) ASSIST IN DEFINITION CONTENTS FINANCIAL/INSTITUTIONAL/SOCIO-ECONOMIC PART FEASIBILITY STUDY; (C) COMMENT ON TERMS OF REFERENCE FOR GARBAGE COLLECTION/DISPOSAL STUDY; AND (D) IDENTIFY FURTHER PROJECT PREPARATION NEEDS INSTITUTIONAL, FINANCIAL, OPERATIONAL AREAS; (6) BANK IS PREPARED TO CONSIDER POSSIBILITY OF FINANCIAL ASSISTANCE TO EPMB FOR COMPLETION OF FINAL DESIGNS AND OTHER STUDIES REQUIRED FOR PROJECT PREPARATION. JULY MISSION WILL DISCUSS AND IDENTIFY NEED AND EXTENT OF SUCH ASSISTANCE. REGARDS COSTA INTBAFRAD

NOT TO BE TRANSMITTED

CLASS OF SERVICE: CABLE

TELEX NO. DATE: 5-14-82

SUBJECT: Barranquilla Water Supply Proj.

DRAFTED BY: WSTOTTMANN

AUTHORIZED BY: R. Costa, Chief, LCWS

DEPARTMENT: LC

SECTION BELOW FOR USE OF CABLE SECTION

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cc: Messrs. Vessels, LC/PD/L2; Sokol, LC2; Guzman, LCWS
TO:     Mr. R. Costa, DC, LCWS
FROM:   Walter Stottmann, ECR, LCWS
DATE:   May 11, 1982
SUBJECT: COLOMBIA—Proposed Barranquilla Water Supply and Sewerage Project

1. On April 30, 1982, Mr. Alex Blanco, General Manager, Empresas Publicas Municipales de Barranquilla (EMMB) visited Bank Headquarters in Washington. The objective of his visit was to deliver a draft of a water and sewerage master plan and to discuss issues related to the proposed project.

Water and Sewerage Master Plan

2. Consultants for EMMB (Glace and Glace, USA) completed on schedule (see our letter of December 24, 1981) a draft water supply and sewerage master plan for the proposed project. The final issuance of the master plan is still subject to review by EMMB, but no major revisions are anticipated. The master plan is well prepared and contains the information requested under its terms of reference. It presents a clear evaluation of the current water supply and sewerage situation and identifies improvement measures through the year 2000. The consultants depict desperately deficient service levels for both water supply and sewerage. About 250,000 of Barranquilla's inhabitants, most of them belonging to the poorest segment of the population, have no public water services at all, and at least 50% of the remaining population is affected by rationing. In sewerage, no more than 40% of Barranquilla's inhabitants are served. To improve services in both sectors, the consultants propose a comprehensive rehabilitation/repair and expansion program at a total cost of about U$S140 million at March 1982 prices, to be carried out before 1991.

New Water Treatment Plant

3. EMMB's previous manager committed EMMB in February 1981 to construct a package treatment plant (Plant §2). This plant is to be designed and constructed by Regemont, a French firm specializing in water treatment plant design and construction, at a total cost of Col$700 million (U$S11 million). Financing for the plant would be provided by the Banque de Paris et des Pays Bas (Col$640 million at 7.5%, 2 years grace, 7 years amortization period) for the foreign exchange needs and the Government of Colombia (Col$300 million). Mr. Blanco informed that the construction of this plant has been approved by the Colombian Government and that final arrangements for contracting the foreign loan will be completed before May 15, 1982. Construction of the plant is scheduled to begin shortly and the expected completion date in December 1983.
4. Previous Bank missions and also the consultants have discouraged EPMB from building this plant, citing technical reasons (see Annex 2 of ETO report dated November 25, 1981). Mr. Blanco, although acknowledging the validity of the Bank's arguments and the consultant's point of view, stated that EPMB's commitment to the construction of this plant, made by a previous General Manager of EPMB and affirmed by the Colombian Government could not be changed. He also argued that going ahead with this plant was the quickest way of adding much needed water treatment capacity, and that EPMB could not wait for capacity expansions under the proposed Bank project which realistically could not come in line before 1985, two years later than Plant #5. In view of the above, I recommend to accept the construction of Plant #6 as a "fait accompli". The Bank should, however, insist that EPMB request Dagrenost, the designer and constructor of Plant #5, and EPMB's consultants to coordinate their efforts with the objective to integrate Plant #6 as closely as possible into EPMB's future overall water treatment scheme.

Creation of a Separate Water Supply and Sewerage Authority

5. In addition to providing water and sewerage services, EPMB is responsible for garbage collection and disposal, street cleaning, and the maintenance of markets, slaughterhouses and a zoological garden. This arrangement is cumbersome from an institutional, technical and financial point of view and has not functioned satisfactorily up to now. Mr. Blanco informed us that EPMB's Board of Directors is considering preliminary plans for separating the responsibility for the various services now provided by EPMB by creating separate institutions, including a separate water supply and sewerage authority. I feel that disentangling EPMB's responsibilities would be a very positive move, although difficult to achieve for political reasons. The Bank should be prepared to assist EPMB in this endeavor through the financing of institutional development assistance under the proposed project.

Garbage Collection and Disposal Component

6. Mr. Blanco expressed EPMB's interest in including a garbage disposal component into the proposed project. Mr. Blanco was informed that the Bank would consider assisting EPMB in its efforts to improve garbage collection and disposal services in Barranquilla, including a study covering the eventual creation of a separate garbage collection and disposal authority. We proposed to Mr. Blanco that EPMB prepare with the help of qualified consultants a sector paper, presenting a comprehensive overview and outlook on the future development and needs of the sector, taking into consideration technical, institutional, administrative and financial aspects. This paper should be completed before appraisal and would serve as the basis for defining the extent and nature of Bank involvement in the sector under the proposed project.
EMB's Performance Under Loan 1072-CO

7. Under Loan 1072-CO, EMB was the recipient of a US$10 million loan through Instituto Nacional de Fomento Municipal (INSPOMUN) for a water supply and sewerage system expansion and improvement project. As pointed out on several previous occasions (NTO report of November 25, 1982, Special Report of February 12, 1982, Annex 3), EMB was beset with serious problems. These problems were the result of poor project preparation, weak project supervision and management on the part of both INSPOMUN and EMB. A frequent turnover at the management level in EMB and political interference contributed significantly to the difficulties in the execution of Loan 1072-CO and to some extent in the early stages of preparation of the proposed project.

8. Under the leadership of its new General Manager, EMB has been successful in improving its performance in the execution of Loan 1072-CO and the preparation of the proposed project. The recent improvements in EMB give reason to believe that the proposed loan, which would be executed under the direct supervision of Bank staff, would be an effective vehicle not only for providing better services to the people of Barranquilla, but also for improving EMB's institutional capabilities.

9. The works, financed under Loan 1072-CO, are now expected to be completed by the end of 1982, 3 1/2 years later than estimated at appraisal. In order to judge EMB's compliance with operational and financial targets (unaccounted-for water, rate of return, operating ratios for services other than water and sewerage, etc.) formulated in the INSPOMUN-EMB on-lending agreement of February 2, 1975, EMB has agreed to provide by May 15, 1982 operational and financial information requested in the Bank's telex of March 3, 1982. Mr. Blanco informed the Bank that this information would be forthcoming in time.

Continuation of Project Preparation

10. With the completion of the master plan, EMB has complied with an important Bank requirement in the preparation of the project. Next, EMB's consultants are to prepare a feasibility study which would address the following major topics:

(a) the scope of the proposed investment program, including detailed cost estimates;
(b) the socio-economic justification of the proposed project (rate of return, long-run marginal cost, beneficiaries' income and capacity to pay, etc.);
(c) EPMB's finances, including all services and the proposed project's financing plan (revenue requirements, tariffs, etc.);

(d) EPMB's organization and recommendation for institutional improvements, including the potential separation of EPMB into separate companies (para. 5).

Consultants are already working on Part a of the feasibility study. This part of the study is scheduled for completion by July 15, 1982 and would be reviewed during the next preparation mission, now scheduled for July 1982.

11. In view of the complexity of EPMB's organization and finances, it is proposed that Mr. Linares (new Financial Analyst in the LCMP Division) during the July mission carry out a comprehensive review of EPMB's finances and organization. The mission would advise EPMB and its consultants on the content of the financial, socio-economic and institutional part of the feasibility study and agree on a realistic completion date, say October 1982. This mission would also identify and help EPMB in the preparation of terms of reference for any additional studies which may be necessary before appraisal, and would not be covered under the terms of reference of the ongoing feasibility study (garbage collection and disposal study (para. 6) and possibly a more comprehensive institutional and financial analysis) than outlined in the terms of reference for the ongoing feasibility study.

12. In addition to the master plan, the feasibility study and other requirements to be identified during the July mission, EPMB's consultants have to prepare final designs for the project components to be included in the proposed investment program. Targets for the preparation of designs are at least 50% before appraisal and a minimum of 80% before Board presentation.

13. Currently, EPMB and the consultants are negotiating the continuation of the project preparation work. The consultants are ready to continue with the feasibility study and designs. EPMB's Board of Directors is waiting for a pronouncement of the Bank on the contents and findings of the recently completed draft of the master plan before authorising the continuation of the work. I recommend to inform EPMB of the Bank's satisfaction with the master plan and to urge EPMB to continue with project preparation, as outlined above (see draft telex, Annex).

Financing of Preparatory Work

14. EPMB is financing the master plan and feasibility study from funds provided by Fondo Nacional de Desarrollo (FONADE). According to Mr. Blanco, these funds will not be sufficient to finance the final designs.
which are estimated to cost around Col535 million (US$560,000). Mr. Blanco states further that EPMB has difficulties in raising the funds necessary for preparing the final designs, and that, therefore, exists the danger that project preparation, now in full swing, may have to be interrupted. This might delay indefinitely the appraisal of the proposed project, now scheduled for early 1983.

15. To avoid delays in the progress of project preparation due to shortage of funds, the Bank should be prepared to extend a Project Preparation Facility (PPF) for the purpose of assisting EPMB in the financing of the preparation of final designs, the study on garbage collection and disposal, and other consulting work which may be necessary to advance the project to appraisal.

Timing of Future Project Preparation

16. The major objective of the preparation mission scheduled to visit Barranquilla in July 1982 is to formulate recommendations on further project preparation requirements, the need for Bank assistance to EPMB for the completion of project preparation (PPF), and an updated time schedule for the proposed project. In the meantime, the most important step towards the appraisal of the project are scheduled, as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Target Date</th>
<th>Executing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion technical part of feasibility study</td>
<td>7/82</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Preparation mission</td>
<td>7/82</td>
<td>IRRD</td>
</tr>
<tr>
<td>Completion financial, institutional, socio-economic part of feasibility study</td>
<td>9/82</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Completion of garbage collection and disposal study and other studies defined during preparation mission (with financing under PPF, if necessary)</td>
<td>12/82</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Preappraisal mission</td>
<td>12/82</td>
<td>IRRD</td>
</tr>
<tr>
<td>Decision to appraise</td>
<td>1/83</td>
<td>IRRD</td>
</tr>
<tr>
<td>50% of final designs completed</td>
<td>2/83</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Appraisal</td>
<td>2/83</td>
<td>IRRD</td>
</tr>
</tbody>
</table>
Depending on the findings and recommendations of the preparation mission in July, and progress made by EPMR and its consultants, the above timetable may have to be revised.

Recommendations

17. A telex (draft attached) should be sent as soon as possible and convey the following:

(a) urge for continued preparation on the basis of master plan found acceptable by the Bank;

(b) outline further project preparation work with time schedule;

(c) inform EPMR of preparation mission’s visit in July 1982 and objectives of the mission;

(d) announce possibility of PPP subject to the results of the preparation mission in July.

cc: Wessels, LCPMR; Leuvena, LC2

WHjs WS

OFFICIAL FILE COPY
TO: MR. ALEX BLANCO, GENERAL MANAGER, EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA (EPMB), BARRANQUILLA, COLOMBIA. REUTELEX OF APRIL 21, 1982. WE ARE LOOKING FORWARD TO SEEING YOU APRIL 29, 1982. WE WELCOME THE OPPORTUNITY TO DISCUSS IN PARTICULAR MASTER PLAN WATER SUPPLY AND SEWERAGE BARRANQUILLA AND EPMB'S PROGRESS IN PREPARATION OF VARIOUS ITEMS REQUESTED BY BANK - REFERENCE ATTACHMENT 2 BANK LETTER OF DECEMBER 24, 1982 AND TELEX TO INSFOPAL/EPMB OF MARCH 3, 1982. REGARDS, R. COSTA, INTBAFRAD
March 25, 1982

Mr. Walter Stottmann
The World Bank
1818 H Street, N.W.
Washington, D.C. 20433

Dear Mr. Stottmann:

Re: Proposed Barranquilla Water Supply And Sewerage Project

Dr. Camilo A. Rincon and I recently returned from Barranquilla where we commenced the negotiation of an extension to the engineering contract so that the proposed engineering work would conform to the schedule contained in a letter from The World Bank dated December 24, 1981, signed by Alberto Favela. On this trip we had an opportunity to review the status of the report.

There were certain minor items to be completed on the "Master Plan" so it will not be possible to deliver the plan to you by April 2, 1982, as discussed in our telephone conversation before your trip to Panama. However, copies of the report will be handcarried to our office by one of our engineers who is coming to the States on April 4, 1982. I am, therefore, planning to deliver a copy to you in Washington on or about April 5, 1982, for your review.

While we were in Barranquilla, Dr. Alex Blanco, Gerente of the Empresas, indicated a desire to meet with you in Washington as soon as possible after you received the "Master Plan" so that he could discuss the report with you prior to your visit to Barranquilla. We hope such a meeting can be arranged and will telephone you to determine if such a meeting is possible.

Very truly yours,

I. M. GLACE, JR.
President

IMGjr/mds
Mr. R. Costa, Chief, LAC
Jozsef B. Buky, Acting Senior Adviser, TWF

December 29, 1981

COLOMBIA - Barranquilla Water Supply and
Sewerage Project

We have briefly reviewed the Preparation Mission Back to Office Report dated November 25, 1981 and at this stage, have a few general comments.

While past experience in Colombia is far from encouraging, the project may present good prospects if the series of actions described in the excellent draft letter to EPC are indeed carried on.

I would take some issue with para. 3 of the BOR referring to the proposed treatment plants. The master plan must clearly deal with this issue and if the plants are indeed unjustified, going ahead with them could seriously effect sound technical and financial planning.

I would recommend that the solid waste issue be treated more than just a small item. This is a good chance to get our feet wet in the sub-sector and having a common authority could enhance the chances of success. I should like to see the (forthcoming?) Project Brief to deal with this issue in detail. We could have a good comprehensive "environmental" project.

cc: Messrs. Kalbermatten, Colladay, Nanjundiah (TWF)

JBBuky:sp
December 24, 1981

Mr. Alex Blanco
Gerente
Empresas Publicas Municipales
de Barranquilla (EPMB)
Calle 32, No. 44-46
Barranquilla, Colombia

RE: Proposed Barranquilla Water
Supply and Sewerage Project

Dear Mr. Blanco:

I would like to join Mr. Costa in thanking you for the hospitality extended to Messrs. Stortmann and Guzman during their recent visit to Barranquilla. Likewise, I was most pleased that you and Mayor Mosquera were able to come to Washington to continue the discussions initiated in Barranquilla on a proposed EPMB water supply and sewerage project. Mayor Mosquera's support for the proposed project is considered to be particularly valuable.

I believe that the understandings and agreements reached during the discussions in Barranquilla and Washington mark a precipitous beginning of a mutual effort to prepare and launch a sound, Bank finance water supply and sewerage project to serve the populace of Barranquilla, an urban center of rapidly growing importance to the Colombian economy.

Summarised below are the understandings reached during the aforementioned discussions and delineate the preparatory work, to be completed by Empresas Publicas Municipales de Barranquilla (EPMB), their consultants and the Bank, to advance the proposed project to appraisal.

Master Plan for Water Supply and Sewerage

In view of the rapid population growth in Barranquilla during the recent past, the Bank feels that any future investments in Barranquilla's water supply and sewerage systems should be guided by rational, least-cost and long-term strategies for the optimal expansion of Barranquilla's water supply and sewerage systems over the next 20-25 years. I understand that since the beginning of 1981, engineering consultants have been working on a master plan under terms of reference reviewed by the Bank. Recently, they issued a preliminary report which presents an extensive compilation of basic data. I find it opportune to stress some points of particular importance that should be observed before the completion of the master plan.

OFFICIAL FILE COPY
Water demand projections should be based on realistic forecasts for future population growth and distribution for the entire Barranquilla Metropolitan Area, including peripheral communities, such as Soledad, Malambo, and Puerto Colombia, which may also be served by EPMB in the future. Sustained population growth in Barranquilla between 3% and 4% p.a. during the next 20 years, as assessed in the consultants preliminary report, appears to be high. Forecasts for residential, commercial, and industrial water consumption should take into consideration that EPMB will take measures to reduce water losses and currently excessive water use levels (metering, adequate tariffs to discourage wastage of water, leak detection).

Regarding the expansion of EPMB's water treatment capacity, I emphasize that optimizing the output of EPMB's facilities (plants #1, #2, #3) should have first priority. The expansion of water treatment capacity should proceed in stages to meet future demands at the least-cost and be guided by the objective to create an integrated and efficient system of facilities using technology compatible with EPMB's operation and maintenance capabilities. EPMB's current plan for expanding its water treatment capacity by constructing plants #4 and #5 does not appear to present an optimal solution either from a technical nor from an economic point of view. EPMB's consultants should analyze in detail the treatment plant expansion issue and develop an expansion strategy based on sound technical and economic planning principles taking into account any irreversible decisions previously taken by EPMB.

In defining the future sewage system expansion and improvement, it should be remembered that rehabilitation of existing sewer lines and pumping stations and reducing infiltration/inflow are often more economical alternatives than the installation of new systems. In certain areas, individual solutions to seepage disposal (septic tanks, etc.) may be more appropriate than the construction of traditional wastewater sewer systems.

We expect that your consultants, as part of the master plan, recommend a first stage investment program, which would serve as a first approximation to the proposed project. Major project components should be identified and preliminary cost estimates presented. As agreed with EPMB's consultants, the master plan and a preliminary definition of the first stage program is expected to be completed in April 1982. I urge you to send a draft of this study for the bank's review in Washington, as soon as it becomes available. The bank considers sending the next mission to Barranquilla after review of the master plan draft. I hope that such a mission could visit Barranquilla in May 1982.

Feasibility Study

The objective of the feasibility study would be to further develop the first stage investment program proposed in the master plan. As
outlined in the consultant's terms of reference, it would present detailed cost estimates based on preliminary designs, but also study the socio-economic impact of the proposed works (internal rate of return, beneficiaries, etc.) and evaluate its financial implications on EPNB (financial requirements, revenues, tariffs). Since the feasibility study will become the basis for our appraisal, your consultants should follow the guidelines contained in the Bank's Appraisal and Project Preparation Handbook. The mission left copies of these documents in Barranquilla. As discussed in Washington, the Bank expects that a first draft of the feasibility study be available for our review in July 1982. The feasibility study would be a main topic of discussion for a second Bank mission in August 1982.

Final Designs

Once EPNB and the Bank agree on the first stage investment program, your consultants should begin preparing final designs. It is the Bank's policy to require that final designs for at least 50% of the total project be completed before appraisal. As agreed, the Bank expects that 50% of the final designs will be ready towards the end of 1982 so that appraisal of the project could take place in January 1983. First disbursements could then take place in October 1983.

Institutional Assessment and Technical Assistance

As pointed out in Washington, the Bank's objectives go beyond the mere financing of works and include the strengthening of the institutional capabilities of its borrowers. Therefore, Bank preparation of a project is not limited to its technical aspects but encompasses the prospective borrower as a whole (its finances, management systems, organization, commercial aspects, etc.). Future Bank missions will take a determined effort to assess EPNB's institutional capacity with the objective to identify needs for improvement. To bring about these improvements, the Bank would be prepared to include in a possible loan the financing of technical assistance and training, and if required, the purchase of maintenance and office equipment as part of the proposed project.

As discussed with the mission in Barranquilla, the Bank sees the need for such improvement in the management and operation of EPNB. In particular, I feel, that a public utility as large as EPNB should maintain a planning office. EPNB's accounting and budgeting and management information systems, as well as internal control procedures, could be improved significantly. In view of the above, I strongly suggest that between now and the arrival of the next mission in May 1982, you take a critical look at EPNB's institutional shortcomings and prepare for discussion with the next mission your suggestions for improving EPNB's capabilities. We recommend that EPNB engage the services of a qualified management consultant to help you in preparing a diagnosis of EPNB's institutional capabilities.
In 1975, EPNB received from IDB a US$10.06 million loan for the execution of a water supply and sewage project. To date, almost seven years after the signature of the loan, the project still has not yet been completed. The Bank expects EPNB to complete the remaining project components (Slides 234 through 273) before approval of the proposed project. We will review the financial requirements for completing the 1975 Project in connection with our review of EPNB's request for the extension of the closing date of our loan 1072-CO and will let you know as soon as a decision is made.

Operational Improvements

The on-lending agreement between IDB and EPNB under Loan 1072-CO, dated February 2, 1975, obliges EPNB to achieve some operational and financial targets (Attachment 1). Comparing operational targets and achievements shows that EPNB has fallen short of the stipulated targets. I urge you to immediately initiate an emergency program to bring down EPNB's high rate of unaccounted-for water. As a first measure, I suggest that the water production meters should be put into working order and calibrated, followed by a determined effort to increase consumption metering, especially for large industrial/commercial users, reduce illegal connections, and detect and repair leaks in the water system. I would appreciate your presenting to us before February 28, 1982 a plan of action for reducing unaccounted-for water and increasing metering. Likewise, I wish to remind you that, as a condition for the next mission's visit, EPNB must revalue its fixed assets as required by the on-lending agreement between EPNB and IDB.

Project Financing

It is the Bank's policy to finance only the foreign exchange component (direct and indirect) of a project. According to the Bank's experience, I estimate that the foreign exchange component for water supply and sewage projects in Colombia amounts to about 30% to 40% of the total cost. The Bank loan would, therefore, be limited to this percentage of the project cost. The Bank would require that EPNB contribute, through its own cash generation about 30% of the total project cost in addition to covering interest accrued during construction on the proposed Bank loan. The remaining funds (about 30% to 40% of total project cost) could come from other sources (IDB, budgetary appropriations from the government, domestic and foreign borrowings, etc.).

Although the size of the required EPNB contribution to the proposed project still needs to be specified, it will be considerable (for example, around US$27 million for a total project cost of US$90 million). It is, therefore, essential that, in its financial planning, EPNB takes
into account that beginning in 1983, it must generate revenue sufficient to cover its contribution to the proposed project, operating costs, debt service obligations, other investments, and working capital requirements.

**KPMG's Financial Position**

I understand that most of the services provided by KPMG other than water supply and sewage are experiencing financial difficulties, particularly garbage collection and street cleaning, and that KPMG did not reach the financial targets (operating ratio) stipulated in the KPMG-INSOFPAI co-lending agreement. It is the bank's policy to require potential borrowers providing more than one service to operate each service on a financially self-sufficient basis and to avoid cost-free transfer of funds and cross-subsidization of services. KPMG should, therefore, between now and appraisal, adopt the measures necessary to make all of KPMG’s services financially self-sufficient. In this context, it will be essential that KPMG find a way to compensate for the loss of property tax revenues used to support its garbage collection and disposal operations.

In preparation of the proposed project, the bank would like to receive, before the arrival of the next mission in May 1983, KPMG's short- and long-term plan for improving the financial position of all its services, including a plan to eliminate transfer of funds and cross-subsidization of services in the near future. To prepare this information, you may want to consider hiring the services of a qualified financial consultant.

Another serious problem is KPMG's poor record of bill collection, especially regarding property taxes. The bank would expect significant improvements in this area before considering appraisal. I would like to receive, before the end of February 1983, your proposed plan of action for improving the collection of bills.

We have been informed that KPMG's energy account arrears to the Electrificadora del Atlantico exceed Cóls.1.90 million. We expect that this matter will be resolved as soon as possible, and definitely before the next mission's visit.

**Direct Bank-KPMG Lending Operation**

As requested by you, the bank would be prepared to consider a direct loan operation with KPMG. Such an arrangement would, of course, only be possible if the Republic of Colombia agreed to and guaranteed such a bank loan. The mission, while in Bogota, discussed this matter with Mr. V. Queso at Departamento Nacional de Planificacion (DNP) and Mr. A. Martinez Vizcaya at INSOFPAI and both expressed verbally their agreement to a direct
Bank-EPB lending operation. As discussed in Washington, I would appreciate it if you could obtain confirmation of these agreements in writing by the Ministry of Finance, UEP and INPEPAL.

Garbage Collection and Drainage Component

As discussed in Washington, I reminded you that the Bank could, as part of a future water supply and sewerage project, finance in a limited way also drainage works and assist you in solving Barranquilla's garbage disposal problem provided that these investments are recuperated by EPB through a cost recovery mechanism acceptable to the Bank. Loan amounts that could be assigned to these two items would necessarily be limited to a small portion of the total loan. Our next mission would be prepared to discuss this matter in more detail.

I hope that the recent discussions in Barranquilla and Washington will pave the way for a successful and rapid project preparation. Please remember that close cooperation between EPB and the Bank is essential for an efficient project preparation. Keep the Bank informed of any new developments regarding the proposed project, and in particular of your consultant's progress in the preparation of the masterplan and feasibility study. Please forward the consultant's progress report to the Bank.

In Attachment 2, the tentative project preparation timetable and the main tasks ahead are summarized. Do not hesitate to contact us if you have any questions.

Sincerely yours,

Alberto Sazvilla
Chief
Country Programs Division
Latin America and Caribbean Region

Attachments
cc: Mr. Acosta, Mayor
    Sarrequilla, Colombia
    Sr. Eduardo Restrepo Duran
    Ministro de Hacienda y Crédito Público
    Sr. Alfonso Jaracillo Salazar
    Ministro de Salud
    Sr. Federico Nieto Tafur
    Director, Departamento Nacional de Planificación
    Dr. Alvaro Martinez Mejia
    Director, INSUPAL

Cleared with and cc: Messrs. Messers, LCPUS; Lecuna, LC2BB; Costa, LCPUS
cc: Messrs. Gutierrez, LAFOO; Yepes, Stotmann, Guzman, LCPUS
WS: js Luis
**COLOMBIA**

**BARRANQUILLA WATER SUPPLY AND SEWERAGE**

Indicators Stipulated in EPMB – INSTOFAL
On-Lending Agreement Dated February 2, 1975

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<th>Indicators</th>
<th>Targets</th>
<th>Achievements</th>
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</thead>
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<tr>
<td>Unaccounted-for water</td>
<td>28 (by 1978)</td>
<td>36 1/</td>
</tr>
<tr>
<td>Metered connections</td>
<td>90,000 (by 1978)</td>
<td>33,200 1/</td>
</tr>
<tr>
<td>Rate of return on revalued fixed assets %</td>
<td>3.0 (1980)</td>
<td>5.4 2/</td>
</tr>
<tr>
<td>Operating ratio for services other than water and sewerage %</td>
<td>66 (by 1979 and thereafter)</td>
<td>96 3/</td>
</tr>
</tbody>
</table>

1/ As of 6/30/81.
2/ Estimated for 1980 on the basis of estimated revalued fixed assets.
3/ For 1980.
<table>
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<tr>
<th>Activity</th>
<th>Target Completion Date</th>
<th>Executing Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan of action increasing operational efficiency water supply (unaccounted-for water increase meter coverage)</td>
<td>2/82</td>
<td>EPMB</td>
</tr>
<tr>
<td>Plan of action increasing efficiency of bill collection</td>
<td>2/82</td>
<td>EPMB</td>
</tr>
<tr>
<td>Completion master plan including definition of first stage investment program</td>
<td>4/82</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Plan of action financial self-sufficiency EPMB services</td>
<td>4/82</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Preliminary proposal institutional improvements EPMB</td>
<td>4/82</td>
<td>EPMB</td>
</tr>
<tr>
<td>Revaluation of fixed assets as of 12/31/81</td>
<td>4/82</td>
<td>EPMB</td>
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<tr>
<td>Preliminary proposals components drainage and purchase equipment for garbage disposal</td>
<td>4/82</td>
<td>EPMB</td>
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<td>Settlat. EPMB debt w/ Elect. Atlantico</td>
<td>4/82</td>
<td>EPMB</td>
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<td>Bank preparation mission</td>
<td>5/82</td>
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</tr>
<tr>
<td>Completion feasibility study</td>
<td>7/82</td>
<td>EPMB/Consultants</td>
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<tr>
<td>Preliminary project financing plan</td>
<td>7/82</td>
<td>EMPS</td>
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<tr>
<td>Preappraisal mission</td>
<td>8/82</td>
<td>Bank</td>
</tr>
<tr>
<td>50% design work completed</td>
<td>12/82</td>
<td>EPMB/Consultants</td>
</tr>
<tr>
<td>Works under Loan 1072-CO completed</td>
<td>12/82</td>
<td>EPMB</td>
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<td>Definite project financing plan</td>
<td>12/82</td>
<td>EPMB</td>
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<tr>
<td>Bank appraisal</td>
<td>1/83</td>
<td>Bank</td>
</tr>
<tr>
<td>100% design completed</td>
<td>7/83</td>
<td>EPMB/Consultants</td>
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<tr>
<td>Board presentation</td>
<td>8/83</td>
<td>Bank</td>
</tr>
<tr>
<td>First disbursement</td>
<td>10/83</td>
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</table>
ATENTAMENTE SOLICITADOS CITA NOVIEMBRE 11 DAS DE LA TARDE CON
INGENIERO WALTER GOTTMAN Y ECONOMISTA ALFREDO CUSCHI PARA
REUNION CON ALCALDE BARRANQUILLA CON SERENTI EMPRESAS PÚBLICAS
MUNICIPALES E INGENIERO INTERVENCIÓN ESTAS ADICIONES DE FUNCIONARIOS
GALDE Y GACE FIRMA CONTRATISTA PLAN MAESTRO AQUEDUCTO Y ALCANTARILLADO PARA TRATAR CON USTEDES NUEVO PRESTAMOS BARRANQUILLA
PARA AQUEDUCTO ALCANTARILLADO Y OTRAS OBRAS DE INFRAESTRUCTURA

SALUDOS
ALEX BLANCO AGELLO
GERENTE GENERAL EMPRESAS PÚBLICAS
BARRANQUILLA

WORLD BANK
33431 CAMRA CO...
November 5, 1981

Mr. Walter Stottmann
The World Bank
1818 H Street, N.W.
Washington, D.C. 20433

Dear Mr. Stottmann:

Thank you for your courtesies to Camilo A. Rincon and myself in the very informative meeting held in your office on Wednesday, November 4, 1981.

We have already contacted Barranquilla concerning another meeting in your office on Wednesday, November 11, 1981, at 2:30 p.m. Confirmation of this meeting is anticipated by telex on Friday. Dr. Rincon will advise you immediately by telephone if there are any changes in this schedule.

Sincerely yours,

I. M. GLACE, JR.
President
23 de Octubre de 1980

Dr. Jaime Devis Pereira
Gerente General
Empresas Públicas Municipales de Barranquilla (EPMB)
Calle 32, No. 44-46
Barranquilla, Colombia

Estimado Dr. Devis:

Re: Proyecto de Abastecimiento de Agua y Alcantarillado - BARRANQUILLA

Recientemente el Banco ha revisado el estado de preparación del propuesto proyecto de abastecimiento de agua y alcantarillado de Barranquilla. El propósito de esta carta es informarle la posición del Banco con respecto a los puntos más importantes del proyecto que deben resolverse y señalar los trabajos preparatorios que deberían realizar las empresas públicas municipales de Barranquilla (EPMB) a fin de permitir la evaluación del proyecto.

Hemos programado la evaluación del proyecto propuesto para agosto de 1981. Sin embargo, el requisito más importante para cumplir con dicha fecha de evaluación es que la ejecución de los estudios de factibilidad esté lo suficientemente avanzada. Tenemos entendido que EPMB ha contratado la ejecución de los estudios de factibilidad con la firma consultora Glace & Glace de Pennsylvania, USA y que la misma va a comenzar dichos trabajos en noviembre de 1980. Estamos muy interesados en seguir de cerca el progreso en la ejecución de los estudios de factibilidad, y por esa razón solicitamos que los informes del consultor sean enviados al Banco periódicamente. Dichos informes nos ayudarán en la programación de futuras misiones de preparación del proyecto en Barranquilla, permitiéndonos además seguir de cerca los estudios de factibilidad para una mejor evaluación del proyecto.

Antes de agosto de 1981, fecha prevista para la evaluación del proyecto, el Banco planea enviar dos misiones más a Barranquilla. La primera está programada para marzo de 1981 y su objetivo sería el de revisar los resultados preliminares de los estudios de factibilidad y recabar mayor información acerca del desempeño institucional y financiero de EPMB. La segunda misión está programada para junio de 1981 y tendrá como meta establecer los componentes y costos del proyecto propuesto y discutir con EPMB diversos asuntos pendientes de resolución, entre otros el financiamiento del proyecto. Esta misión está, por supuesto, superditada a la disponibilidad de resultados suficientes del
El Banco anticipa que el proyecto tendrá tres componentes principales: a) abastecimiento de agua, incluyendo la expansión de la planta de tratamiento y de la capacidad de almacenamiento, transmisión y distribución del sistema de Barranquilla; b) alcantarillado, incluyendo la construcción de varios interceptores y, posiblemente, instalaciones para tratamiento de desagües; y c) un programa de asistencia técnica e institucional, diseñado para fortalecer la capacidad financiera y técnica de EPM. Anticipamos la necesidad de contratar los servicios de consultores para supervisar la construcción y administración del proyecto. El alcance de los dos primeros componentes del proyecto dependerá de los resultados del estudio de factibilidad. Durante las próximas misiones de preparación y evaluación se identificarán las necesidades de asistencia de EPM.

El Banco está considerando aceptar la solicitud de EPM de ser el prestatario del préstamo propuesto, siempre que INSTOFAL y el Gobierno acepten esta modalidad y que esté último se comprometa a garantizar el préstamo del Banco y a proporcionar a EPM suficiente y oportuno financiamiento. En el interín, le sugerimos que EPM obtenga del Departamento Nacional de Planeación confirmación de la prioridad que asigna a este proyecto y seguridades de que el Gobierno Nacional está dispuesto a otorgarle el apoyo financiero necesario.

El Banco también está considerando la solicitud de EPM para financiar el diseño final de las obras a ser incluidas en el proyecto propuesto, y se propone tomar una decisión sobre este tema una vez que reciba el informe de la misión programada para marzo.

Una condición previa para que el Banco financie un proyecto de abastecimiento de agua y alcantarillado en Barranquilla será lograr un progreso razonable en los programas de construcción actualmente en ejecución con financiación de nuestro Préstamo 1072-CO a INSTOFAL, como así también en el cumplimiento de las estipulaciones financieras e institucionales contenidas en el convenio INSTOFAL y EPM relativo a dicho préstamo.

Como usted ha de saber, las obras del proyecto de Barranquilla, a ser financiadas con el Préstamo 1072-CO, fueron modificadas sustancialmente en 1976. Hasta el momento, estos cambios no han sido incorporados en los documentos de préstamo. Mediante carta del 14 de febrero de 1980, el Banco ha solicitado a INSTOFAL que proporcione la justificación y explicaciones necesarias para modificar los documentos de préstamo. Esperamos que EPM colabore con INSTOFAL, en la medida que sea posible, en la recopilación de la información necesaria.
En base a la información disponible sobre producción de agua y facturación en 1979, estimamos que el porcentaje de agua no contabilizada excedió el 40% en 1979. El sub-acuerdo de Préstamo F-BIERF-008-75 entre INDURALY EPMB del 2 de febrero de 1975 especifica que para 1978 debía alcanzarse la meta de 24%. Para que las operaciones del sistema de agua de Barranquilla sean eficientes en el futuro, es necesario que el porcentaje de agua no contabilizada sea reducido a ese nivel. En vista de los esfuerzos que EPMB está haciendo actualmente para instalar un mayor número de medidores y detectar y reparar fugas en el sistema, confiamos que EPMB podrá lograr dicha meta para fines del año 1981.

Como usted sabe, el Banco solamente financiará un monto equivalente al "componente importado" del proyecto, en tanto que el resto de los fondos deberá provenir de fuentes colombianas, incluyendo fondos presupuestarios, generación interna de EPMB y préstamos que EPMB pueda obtener en Colombia. Aunque el monto de la contribución de EPMB todavía no ha sido determinado, los planes financieros de EPMB tendrían que estar dirigidos a generar ingresos suficientes para cubrir una porción razonable del costo del proyecto (alrededor del 30%) además de cubrir los costos de operación, obligaciones de servicio de la deuda y otras inversiones y capital de trabajo necesarios. Para este efecto, sería necesario que EPMB descontinúe la práctica tradicional de subvencionar otros servicios, particularmente, recolección y disposición de basura y pavimentación de calles, con fondos provenientes de los servicios de abastecimiento de agua y alcantarillado.

En espera de sus comentarios, quedamos de Ud.

Atentamente,

[Signature]

Jefe
División de Abastecimiento de Agua y Alcantarillado
Región de Latinoamérica y el Caribe

Cc: MR. Lecuona, LCEDE

Cc: Messrs. Gutierrez, LAFCO; Saenz, LEG; Roach, LCPWS;

Wetottmanije [s]
LAC Information Center
Walter Stottmann, ECR, LCPWS

COLOMBIA—Proposed Barranquilla Water Supply and Sewerage Project
Status of Project Preparation

1. On October 13, 1980 I called Mr. Alex Blanco of Empresas Publicas Municipales de Barranquilla (EPMB) to inquire about progress in the execution of the feasibility study. Mr. Blanco informed me that EPMB had retained the US consulting firm of Glace and Glace, Pennsylvania and that work on the study is now expected to commence in November 1980. This information is contrary to EPMB's earlier plan to initiate work on the study in September 1980.

2. According to Mr. Blanco, the feasibility study is expected to be completed by the middle of 1981. First preliminary results (survey of existing situation, demand projection, etc.) would not become available before February/March 1981.

3. In view of the delay in project preparation, I feel that the tentative appraisal data and the scheduling of project preparation missions to Barranquilla, appearing in the Project Brief of August 29, 1980, should be adjusted as follows:

<table>
<thead>
<tr>
<th>Mission</th>
<th>Date</th>
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<tr>
<td>Preparation I</td>
<td>3/81</td>
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<tr>
<td>Preparation II</td>
<td>6/81</td>
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<tr>
<td>Appraisal</td>
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4. I have told Mr. Blanco that it is essential to keep the Bank informed about the status of preparation for the proposed project. Mr. Blanco promised to send a letter describing current status of project preparation by October 17, 1980.

cc: Mesana, Zavala, Costa, LCPWS; Favilla, Lecuona, LCZMS

WSStottmann:js
GERENTE GENERAL, EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA (EPMB)
BARRANQUILLA, COLOMBIA

NO COMPLACIO COMUNICARLE MISION COMPUESTA SENORES WALTER STOTTMANN
(INGENIERO) Y ALFREDO GUZMAN (ANALISTA FINANCIERO) VISITARAN
EPMB OCTUBRE 20-21 OBJETO REVISAR PROGRESO PREPARACION PROYECTO
ACUEDUCTO Y ALCANTARILLADO DE BARRANQUILLA. EN PARTICULAR
MISION ANALIZARA CON USTEDES (A) INFORME PRELIMINAR PLAN
MAESTRO, (B) ASPECTOS ADMINISTRATIVOS Y FINANCIEROS, (C) AVANCE
PROYECTO BIRF 1072-CO. RECOMENDAMOS TENER DISPONIBLE
SIGUIENTE INFORMACION/DOCUMENTACION (1) ESTADOS FINANCIEROS
A SEPTIEMBRE 1981 POR SERVICIOS (2) ORGANIGRAMA VIGENTE,
(3) ESTATUTOS (4) ESTADISTICAS REFERENTES SERVICIOS ACUEDUCTOS
Y ALCANTARILLADO ANO 1980 Y A SEPTIEMBRE 30, 1981 SOBRE
PRODUCCION, FACTURACION, PERSONAL, RECAUDACIONES Y
CONEXIONES.

SALUDOS, RENE COSTA, INTBAFRAD
OFFICE MEMORANDUM

TO: Messrs. W. Stotmann, ECR and A. Burgos, FHA/CPWS

FROM: Rene Costa, Acting Chief, LCPWS

DATE: October 15, 1981

SUBJECT: COLOMBIA—Loan 860-00—Medium Size Cities Water Supply and Sewerage Project
Loan 1072-00—Second Multi-City Water Supply and Sewerage Project
Loan 1726-00—Third Medium Size Cities Water Supply and Sewerage Project
Limited Supervision Mission
Preparation Mission
Loan 1726-00
Preparation Mission
Proposed Cucuta Water Supply and Sewerage Project
Pre-Identification Mission

TEAMS OF REFERENCE

1. You should travel on October 19, 1981 to Colombia and stay there for about two weeks and visit the Instituto Nacional de Fomento Municipal (INSFOPAL) in Bogota (about 4-5 days), Empresas Públicas Municipales de Barranquilla (EPM) in Barranquilla (2-3 days), and Empresas Municipales de Cucuta (EMC) in Cucuta (3-4 days).

2. Mr. Walter Stotmann, Project Officer for the LCPWS Division’s INSFOPAL Projects, should acquaint himself with INSFOPAL and review some important issues regarding the execution of Loans 860-00, 1072-00, and 1726-00. You should follow up on actions requested in our letter of September 2, 1981 to INSFOPAL, in particular on:

(a) plans and actions for executing the first stage of an institutional development program at INSFOPAL;
(b) actions towards finalizing co-lending agreements with sub-borrowers under Loan 1726-00;
(c) plans and actions for completing works financed under Loan 1072-00 in view of upcoming loan closing date (December 31, 1981); and
(d) plans and actions for completing works financed under Loan 860-00.

3. In Cucuta, you should discuss with EMC a water supply and sewerage project proposed for the city of Cucuta. In particular, you should:

(a) review available studies concerning the expansion of Cucuta’s water supply and sewerage systems;
(b) establish, as far as possible, the scope, cost and proposed financing arrangements for the project;
(c) discuss further project preparation needs and EMC’s plan to hire consultants for the preparation of final designs;
(d) establish with EMC management a tentative schedule for project preparation to appraisal;

(e) review and assess EMC’s performance in executing projects under existing Loans 1072-60 and 1356-60; and

(f) time permitting, review EMC’s institutional capacity and financial position.

4. In Barranquilla, you should discuss with EPMB progress made on the preparation of the proposed Barranquilla Water Supply and Sewage Project. In particular, you should:

(a) discuss and review with EPMB and its consultants the contents of the preliminary report on the expansion of Barranquilla’s water supply and sewerage system;

(b) discuss and agree on further project preparation needs;

(c) establish with EPMB management a new time schedule for project preparation to appraisal;

(d) review and assess EPMB’s performance in executing projects financed under existing loan 1072-60; and

(e) time permitting, review EPMB’s institutional situation and financial position.

5. On your arrival in Bogota, you should hand a copy of these terms of reference to the Bank’s Resident Representative. You should keep him informed of the mission’s activities and findings.

6. While in Bogota, you should discuss with the National Planning Department and the Ministry of Finance the results of your findings in Cucuta and Barranquilla and ascertain the Government’s priority assigned to one or both projects and the possibility of direct lending operation(s) with EMC and EPMB.

7. Upon your return to Washington, you should report the mission’s findings and recommendations to Messrs. Costa (Cucuta and Barranquilla) and Yepes (supervision of Loans 860/1072/1726-60). Considering that the mission members are scheduled to carry out an appraisal for a water supply and sewerage project in Panama beginning November 16, 1981, you should prepare a short back-to-office report highlighting only the mission’s main findings and letters to EPMB, EMC and BESFONAL.

Cleared with and cc: Messrs. Yepes, LCPUS and Lecuona, LCZDB

cc: Messrs. Wessels, LCPUS; Fevila, 3, LCZDB; Saenz, LEG; Gutierrez, LAFO; Sokol, LCZDB; Rajagopal, 3, PAS; Willoughby, TWI; Barker, HOC; Grothe, CYR;

Mr. DeVan, LCPUS; LACIC
AAA) WOGART (LGF/IOF) HANDCARRYING THIS WEEKEND PRELIMINARY
CONSULTANT'S REPORT ON ABOVE.

BBB) FUTURE FINANCIAL SITUATION OF EMPRESAS PUBLICAS BARRANQUILLA
MAY BE AFFECTED BY CURRENT POLITICAL STRUGGLE BETWEEN ITS GENERAL
MANAGER AND MUNICIPAL COUNCIL OVER CONTROL OF REVENUES FROM LOCAL
REAL STATE TAX. UNTIL NOW REVENUES FROM SUCH TAX HAVE BEEN AD-
MINISTERED AND USED BY EMPRESA TO FINANCE ITS PROGRAMS. MUNICIPAL
COUNCIL HAS DECIDED TO ASSUME DIRECT CONTROL OVER SUCH REVENUES.
NO DEFINITE SOLUTION HAS YET BEEN REACHED. TIMING OF ABOVE PROJECT
LIKELY TO BE DELAYED AS A RESULT. STRONG PRESSURES TO RESSIGN BEING
EXERTED ON GENERAL MANAGER. REGARDS, GUTIERREZ.

WORLD BANK 440099
4130 W IBRD CO...
BOGOTA, AUGUST 27, 1981

LECUONA, COSTA

306-AAA SOKOL HANDCARRYING THIS WEEKEND WATER SUPPLY AND SEWERAGE PROJECT PROPOSAL (2 COPIES) FROM EMPRESAS MUNICIPALES DE CUCUTA. INITIAL IMPRESSION IS PROJECT IS WELL PREPARED, AND HAS RECEIVED FORMAL DNP SUPPORT. BBB WILL BE FORWARDING SHORTLY INITIAL RESULTS OF CONSULTANTS STUDY FOR WATER SUPPLY PROJECT IN BARRANQUILLA. REGARDS,

GUTIERREZ

This project comes to me interesting me. I would like a quick memo and if possible a view of it in order to pursue.

6/8/81

LOG No. C-1-167

To.

Action Date. N.P.
Walter

Please see me on this.

Costilla

AAA - BE PROPOSED BARRANQUILLA WATER PROJECT

AAA. CONSULTANTS FINALLY INITIATED WATER SUPPLY STUDY LAST WEEK. FIRST RESULTS ARE NOW SCHEDULED TO BE AVAILABLE BY SERTECOS. SUGGEST WE SCHEDULE PREPARATION MISSIONS ACCORDINGLY.

Date: 3-19-81

To:

By: REYNOLDS

GEPB WATER SUPPLY SEWERAGE

DISTRIBUTION No.: 3-19-81

Log No.: 00-1565

Costilla

REYNOLDS
DR. ALFREDO GUTIERREZ
Bogotá, Colombia

RE PROPOSED BARRANQUILLA WATER SUPPLY PROJECT (FY835)

I WOULD APPRECIATE YOUR INQUIRIES AND FOLLOW UP WITH EPMB,
AND, TO EXTENT NECESSARY, WITH NATIONAL AUTHORITIES, ON
MR. ZAVALA’S OCTOBER 23, 1980 LETTER TO EPMB, COPIED TO YOU.

IN PARTICULAR, INTERESTED TO LEARN ABOUT:

(AAA) CONSULTANT’S PROGRESS ON FEASIBILITY STUDY,

SCHEDULED TO START NOVEMBER 1980.

(BBB) SUITABILITY TO, AND LIKELY READINESS OF, EPMB,
FOR TWO PREPARATION MISSIONS PRECEDING PROJECT APPRAISAL, NOW
SCHEDULED FOR MAY AND AUGUST 1981, RESPECTIVELY.

(CCC) PROGRESS MADE BY EPMB IN PERSUADING INSIPOFAL,
DPN AND MINHACIENDA TO ALLOW EPMB TO BE BORROWER, WITH
GOVERNMENT GUARANTEE, AND REACTIONS, IF ANY, FROM THOSE
THREE NATIONAL AUTHORITIES.

REGARDS
FAVIlla INTBAFRAD

NOT TO BE TRANSMITTED
SUBJECT:
Barranquilla Water Supply Proj. Daniel L. Ecuuena
Cleared with and cc: Messrs. Costa,
LCPWS; Lecuena, LC208
cc: Messrs. Stottmann, LCPWS, of;
LCP
Powers, LCP
Whitmore, Pos Asst., LCP

DISTRIBUTION: Final Copy
Name: Technical Copy
CARANT: Doc/Copy
HERE: Original to Fathy
Mr. W. Stottmann, LCP

Josef B. Buki, Senior Sanitary Engineer, TNT

COLOMBIA - Barranquilla Water Supply

Project Brief

We have reviewed the Project Brief (PB) dated August 29, 1980 and I list below our comments and/or queries regarding the proposed project.

1. In general terms the PB gives the impression that despite this being our second operation we seem to have a very limited amount of information on Barranquilla. Population projections are vague and demand figures are not even mentioned. What are the proposed system capacities based on and are these to be verified in detail in the feasibility reports yet to be prepared? Does an urban development plan exist for Barranquilla and particularly the urban poor?

2. According to the latest supervision report both IHSPFAL nor EPHB have been putting up a dismal performance on a relatively small project. They appear to be in default on most covenants and the PB does not paint an improving picture. What gives us the confidence to propose a much larger project now?

3. Regarding the technical aspects of the project I have the following observations:

(i) There is no mention of distribution expansions. How are the urban poor on the city's peripheries to be served?

(ii) Experience shows that it is not much use to set an unaccounted-for water reduction target of XX without a firm program having been agreed to achieve it.

(iii) If we are uncertain of the water demand (para. 4.07) what was the basis for the design of the sewer capacities?

(iv) Is the perpetuation of discharging raw sewage into the Magdalena River environmentally acceptable? Para. 4.10 is a bit confusing.

(v) The sewer system would serve 70% of the population. What about the rest?

4. On the financial and institutional side:

(i) Desirable it may be but it is not part of this project to ensure overall financial self-sufficiency for each of EPHB's services. The cross subsidy should certainly stop but this could be controlled by establishing separate books and bank accounts for the water and sewer services. Incidentally, are these independent departments?

OFFICIAL FILE COPY
(ii) Para. 6.06 states that we have no picture of HPMB's finances. If there is nothing provided under the first projects supervision how do we know they can carry the debt burden?

(iii) Para. 6.04 is not very clear. Are we proposing a management study? If so who is going to do it and it certainly should be under way before appraisal.

5. I would be happy to discuss these and any other points with you.

cc: Messrs. Namjundiah, Freedman, Colladay (TMT)

JRB/AFD
TO: Mr. Rene L. Costa, Acting Division Chief, LCPS
FROM: Daniel C. Leucona, Acting Division Chief, LCPS
DATE: September 24, 1980

SUBJECT: COLOMBIA: Barranquilla Water Supply Project

1. The following are my comments on the August 29 draft Project Brief for the above project.

   General

2. As far as the sector and the proposed loan are concerned:

   (a) If the Brief is to live up to its name, it should be considerably shortened;

   (b) The proposed project preparation schedule could be compressed somewhat after the second preparation mission; for instance, I would recommend to advance the preparation of final design and, perhaps, the appraisal mission. At any rate, if the project is appraised in June 1981, we should try for a Board Presentation during the first half of FY82.

   (c) There is a question as to whether the proposed service levels for water supply and sewerage for 1980 and 1990 (para. 1.07) can be realistically achieved (see attached Mr. Sokol’s note). The relevant portions of the Plan de Integración Nacional should be reviewed. In the same vein, current service levels for water supply and sewerage as a percentage of Barranquilla population should be stated and the improvements expected from Loan No. 1072-CO should be quantified. This should permit to establish the projected gap between service levels after completion of Loan No. 1072-CO and realistic Government objectives, as assessed by the Bank (paras. 4.07-4.12). The Project Brief should also indicate how the Bank insure that the proposed project will benefit mostly low-income population (para. 5.07).

   (d) At present the Empresas Públicas Municipales de Barranquilla (EPM) are not independent from INSPOM, presumably, because of their failure to satisfy current autonomy requirements. The Brief should explain what the requirements are, why is autonomy for EPM desirable and what steps by INSPOM and EPM are necessary to obtain such autonomy (paras. 1.04, 3.01, 6.02). Additional action which is still necessary includes the determination of Government willingness to guarantee a Bank loan to EPM (para. 6.02).

The Project

3. Comments concerning the likely contents of the project and likely project issues include:

   (a) Clarification of the scope of the proposed institution building and specifically:

      (i) whether it should cover EPM entirely or its Water Supply Department only (para. 6.04);
Assigning higher priority to EPMB financial viability as a sine qua non for technical, operational, organizational and administrative improvements (paras. 4.11 (c) and (d)).

(b) Reports on improvements in EPMB's financial management and condition (paras. 4.02 and 4.04) do not seem to have factual basis; what basis do we have to expect improvements in 1980? Perhaps the lack of financial analysis and projections (para. 6.06) could be overcome by looking into the financial objectives agreed between INSTFOPAL and EPMB under Loan No. 1072-CO. The Brief criticizes service cross-subsidization at EPMB (para. 4.03) and recommends that Bank financing be conditioned to discontinuing this practice (para. 6.09). Before doing so, however, I think we should look at other Colombian utilities where water supply and sewage are being subsidized from revenue surpluses from other services (vg. INCOA Loan No. 1523-CO).

(c) I do not agree that reduction of unaccounted-for water to the level agreed for Loan No. 1072-CO should be a condition of loan effectiveness (para. 6.09). If unaccounted-for water should be reduced by 50% from its current level the feasibility of doing so in 24 months should be established first; would it be possible to do it sooner?

(d) The first sentence of para. 6.03 seems contradictory. Engineering and supervision of the proposed project is likely to be awarded to Colombian consultants operating in the Caribbean coast area, i.e., the same pool of professional expertise from which EPMB's staff is being recruited. Can the Bank concerns be satisfied in this fashion? Or should the required skills and experience of the consultants be agreed in advance to ensure that a higher level of technical capacity is available at EPMB to carry out the proposed project?

(e) The Brief offers no explanation as to why Bank financing of final design is necessary or desirable (paras. 5.04 (c) and 6.10). At any rate we would need to know the amount likely to be required and the timing of those expenditures before choosing between the project preparation facility and retroactive financing.

Miscellaneous

4. (a) At the time the Bank suggested an alternative approach to expanding water supply services in Barranquilla (paras. 3.02 and 3.04) the Bank also recommended some interim measures, (vz., examination of treatment plant to bring it to its design capacity). A reference to the outcome of these measures would be desirable in arriving at a proper project design.

(b) Paragraphs 4.05 and 6.08 relate the lack of formal agreement between the Bank and INSTFOPAL on modifications of the project financed with Loan No. 1072-CO. This loan covers a number of cities besides Barranquilla. I think that this is a problem of loan administration, having little to do with the preparation of the above project.

cc: Menotti, Fevella, LC2 (o/r); Luvola, LCP25 (o/r); Stotman, LC25 (o/r)

Deconcentra
1. The above project brief is in support of the Government’s efforts to improve and increase the availability of water supply and sewage systems in Colombia and is, therefore, a step in the right direction. Although I agree with the above, I have some comments which I am passing along to you.

2. It is estimated that at present only 64% of Colombia’s total population has access to potable water and 40% to excreta disposal services. These averages are still low and indicate potential possibilities of serious health hazards. In this connection, mention of deaths from gastroenteritis, diarrhoea and other water-borne diseases by infants, which to a large extent are attributable to lack of the above services is omitted from the brief and therefore it does not convey a clear picture of the situation of the sector. On the contrary, one may be misled into thinking that all is well and better than in most of Latin America. Colombia’s development plan (PN) carries a section on this and such material could be used. From the PN’s statistics, one may infer that the Government’s water supply objectives for 1980 may not be met.

as opposed to what section 1.07 of the brief indicates. Objectives for 1990 (section 1.08) may be even harder to attain. Therefore, the Bank should assess better the possibilities and requirements needed to attain such objectives.

3. Insufficient attention is placed on the continuing pollution of the Magdalena River and of anti-pollution policies and measures needed to control and reduce pollution levels.

4. The possibility of Bank financing of a program to reduce water losses by leakages and possibly the purchase of meters should be considered given the high returns it could have for EPMH finances. Although section 5.09 describes the current situation and what is proposed to be done by 1981, it may be somewhat over optimistic. Sufficient progress in this area is yet to be seen.

cc: Mr. Favilla
**LAC PROJECTS DEPARTMENT**

**ROUTING OF NON-APPRAISAL REPORTS**

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**TYPE OF REPORT:** Project Brief

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<tr>
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<td>Loan Officer (Insert name: Mr. Lekona)</td>
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<td>CPS: PAS/S: Mr. Buku</td>
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Clearance of letter (circulated separately) by September 8, 1980.

**COMMENTS BY ORIGINATING DIVISION CHIEF/S**

This is a preliminary Project Brief based upon findings of a reconnaissance mission of February 1980. The next critical step in project preparation is the start of feasibility studies scheduled to be completed by April 1981. Main issues and the mission's recommendations are contained in Section 6. Financial difficulties of EMP will be satisfactorily overcome in the execution of works financed under Loan 1072-00 seem to be the outstanding issues.

**FROM (SIGNATURE OF DIVISION CHIEF OR DEPUTY):**

Alfonso Zavala, Division Chief, LCPS

**DATE:** August 29, 1980

**FOOTNOTES:**

a. Dates by which draft letters (give annex number) should be issued if no comments are received (see LCP Director's Memo No. 14, Revised Amendment).

b. Where points are flagged in to or guidance sought from persons in the Central Projects Staff (CPSS) or Project Advisory Staff (PAS), their names should be listed.

c. State if the report raises any issues; if so, indicate relevant paragraph numbers, and/or briefly describe the issues involved.
BARRANQUILLA WATER SUPPLY PROJECT

PROJECT BRIEF

1. Sector Development Issues, Objectives and Strategies

Population

1.01 The population of Colombia in mid-1980 was estimated to be 26.8 million. It is growing at a rate of 1.1% p.a., down significantly from the rate of 3.2% p.a. which prevailed in the early 1960s. Of the total population, more than 60% live in communities of 2,500 inhabitants or more which are classified as urban. The urban population is growing at an annual rate of about 4.3%, down from 6% in the early 1960s. The rural population (about 40% of the total) is estimated to be growing at 1% p.a., halting the trend of negative population growth in rural areas which occurred during the 1960s. In contrast to other Latin American countries of comparable size and development, Colombia has several large urban centers: Bogota, its capital city, has about 4 million inhabitants; Medellin, 1.4 million; Cali, 1.2 million; and Barranquilla, 1.9 million. Present indications are that immigration to the cities has somewhat slowed, but is still significant, particularly in Barranquilla, Colombia's dominant city on the Atlantic Coast. This rapid population growth of Barranquilla and other cities has created and will continue to create severe strains on the infrastructure these cities have to provide.

Service Levels

1.02 The availability of water supply and sewerage services in Colombia ranks among the highest in South America. It is estimated that at the present time about 73% of Colombia's urban population has access to potable water through house connections and that about 60% are served by a sewerage system. Service levels in rural areas are lower, with about 40% of the population having access to piped water supply and about 12% having access to sewerage systems. Urban dwellers without access to piped water and sewerage systems generally belong to the poor segment of the urban population.

1.03 Waste disposal services are provided in urban areas by sanitary or combined sewerage systems. In rural areas usually alternative systems such as septic tanks, latrines and other individual waste disposal systems are used. Sewerage and industrial wastes are largely untreated and the rivers downstream of major population centers are becoming increasingly polluted.
Sector Organization

1.04 Responsibility for the water supply and sewerage sector in Colombia rests with the Ministry of Public Health. Implementation of national sector policies in urban areas (communities with more than 2,500 inhabitants) is the responsibility of Instituto Nacional de Fomento Municipal (IN SFOPAL), while Instituto Nacional de Salud (INAS) is in charge of sector development and supervision for rural communities. Under decrees issued in December 1975 and June 1976 designed to decentralize sector activities, IN SFOPAL transferred some of its initial responsibilities to regional empresas (SEMOS) and municipal empresas. These empresas now execute design, construction and operation of their water supply and sewerage systems under the guidance of IN SFOPAL. Municipal empresas may become independent from IN SFOPAL when they can demonstrate technical and financial viability. At present the empresas in Bogota, Cali, Medellin and Palmira are autonomous. In the past, project execution by the empresas and supervision and guidance by IN SFOPAL has not been satisfactory due to institutional inadequacies in the empresas and IN SFOPAL and the inability of the empresas and IN SFOPAL to attract adequately qualified personnel in sufficient numbers.

Sector Finances

1.05 The Colombian Government’s stated financial objectives for the sector are to have each empresa set tariffs at levels which would recover all operating and financial costs. In light of the social nature of the sector, tariff structures must also subsidize low-income consumers and thus provide for income redistribution. Many empresas have not yet reached the financial viability objective and still receive assistance from the government.

1.06 External financing has been used extensively during the past two decades in Colombia for the development of the water supply and sewerage sector. External assistance started in 1961 and more than US$300 million have been committed since then. Of this amount, about US$240 million were lent by IBRD; the rest by the Inter-American Development Bank (IDB), USAID, Eximbank, and the Kreditanstalt Fur Wiederaufbau (KFW).

Sector Objectives

1.07 Government objectives for the 1970s were to provide water supply to 80% and sewerage services to 70% of the urban population by 1980. It appears that the 1980 goals for water supply will be met, but that sewerage objectives will not be attained. A major constraint has been lack of financial resources, as internal cash generation has fallen short of the level expected and government funds and foreign borrowings have not been sufficient to meet the gap between available funds and requirements. There have also been managerial and technical staffing constraints which have retarded sector development, especially in medium and small-size cities and rural areas.
1. By 1990, the Colombian Government plans to provide piped water to 90% of the urban population and 55% of the rural non-dispersed population. Sewerage service level objectives are 80% and 55%, respectively. The government has explicitly recognized the need to expand sector services to the poor and expects to accomplish this objective by using cross-subsidization among different income consumer groups. Sector objectives for 1990 are attainable provided sufficient internal and external financial resources become available during the next decade. The projected level of annual expenditures is in excess of US$100 million, of which 50% is to be financed from external sources, 35% from government loans and 15% from local loans and internally-generated funds.

2. Bank/Country Goals, Role and Sector Lending Strategy

2.01 A large share of the government’s development efforts during the past decade have been directed toward improving the health and standard of living of the poorest segment of Colombia’s population and a substantial and increasing share of the development budget has been allocated to the social sector (rural development, agriculture, nutrition and water supply). In accordance with these objectives, the Bank has been assisting Colombia since 1968 in the implementation of water supply and sewerage sector objectives. Since 1984, the Bank has made eight loans (US$233.4 million) to the Water Supply and Sanitation Sector (Table 1).

2.02 These Bank loans not only assisted or are assisting in the construction of water supply and sewerage facilities, but also in accordance with the goals of the Colombian Government, have the objectives to:

(a) improve management practices in the emprezas and financial intermediaries;

(b) establish financial policies to make the emprezas financially viable and to assume a reasonable level of self-financing of investment programs; and

(c) reduce environmental pollution.

2.03 In addition to the loans listed in Table 1, the Bank began in 1977 to assist in the financing of water and sewerage works in rural areas. Loans 849-CD and 1163-CD for the agricultural sector include small water components. The Integrated Rural Development Project (Loan 1357-CD) provided US$3.2 million for a water supply component and the Integrated Nutrition Improvement Project (Loan 1467-CD) included US$1.7 million for water supply and irrigation construction. Water and sewerage components are also included in the First Urban Development Project (Loan 1558-CD) directed toward upgrading the marginal zones of 23 medium cities. Furthermore, Loans 1593-CD (Cartagena Free Trade Zone) and 1694-CD (Cartagena Urban Development) contain water supply and sewerage components.
<table>
<thead>
<tr>
<th>Year</th>
<th>Loan Number</th>
<th>Borrower</th>
<th>Purpose</th>
<th>Amount (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>536-CO</td>
<td>EAAB</td>
<td>Water treatment and transmission - Bogota</td>
<td>14.0</td>
</tr>
<tr>
<td>1970</td>
<td>682-CO</td>
<td>ENGALI</td>
<td>Water treatment and distribution - Cali</td>
<td>18.5</td>
</tr>
<tr>
<td>1971</td>
<td>741-CO</td>
<td>EAAB</td>
<td>Water storage, transmission and treatment - Bogota</td>
<td>88.0</td>
</tr>
<tr>
<td>1971</td>
<td>738-CO</td>
<td>EPMF</td>
<td>Water supply, sewerage - Palmira</td>
<td>2.0</td>
</tr>
<tr>
<td>1972</td>
<td>860-CO</td>
<td>INSFOPAL</td>
<td>Water supply, sewerage - medium-sized cities (?)</td>
<td>9.1</td>
</tr>
<tr>
<td>1975</td>
<td>1072-CO</td>
<td>INSFOPAL</td>
<td>Water supply, sewerage - medium-sized cities (?)</td>
<td>27.0</td>
</tr>
<tr>
<td>1978</td>
<td>1523-CO</td>
<td>ENGALI</td>
<td>Water supply, sewerage, drainage - Cali</td>
<td>13.8</td>
</tr>
<tr>
<td>1979</td>
<td>1697-CO</td>
<td>EAAB</td>
<td>Water supply, sewerage, drainage - Bogota</td>
<td>30.0</td>
</tr>
<tr>
<td>1979</td>
<td>1726-CO</td>
<td>INSFOPAL</td>
<td>Water supply, sewerage, technical assistance-medium-sized cities(24)</td>
<td>32.0</td>
</tr>
</tbody>
</table>

Total: 233.4
2.04 The Bank's water supply and sanitation sector lending program for fiscal years 1981 through 1985 envisaged continued strong involvement as indicated in Table 2. In view of financial constraints in the sector, Bank lending will remain an important factor in assisting the government to achieve sector objectives for the 1980s.

3. Project Origin and Status of Preparation

3.01 Currently, Empresas Publicas Municipales de Barranquilla (EPMB) is a beneficiary of Loan 1072-00 under which the Bank, through INSFOPAL, is providing US$10 million towards the expansion of water supply and sewerage services in Barranquilla. The works financed under this loan are projected to be completed by the end of 1981. In spite of system improvements and expansions financed under Loan 1072-00, the level of services in both water supply and sewerage will remain deficient (paras. 4.07-4.10). Therefore EPMB, realizing the urgent need for additional investments in the water supply and sewerage sector, approached the Bank with a request for another loan for the expansion of its water supply and sewerage systems. In November 1979 the Bank sent a reconnaissance mission to Barranquilla to gather information about a future water supply and sewerage project.

3.02 EPMB proposed to this mission for Bank financing the immediate realization of a water supply system expansion program consisting of the construction of a new treatment plant (750 l/sec) and some transmission and storage facilities in the northern part of the city to be followed by a more comprehensive and as yet undefined expansion program covering the remaining part of the city. The mission rejected this plan arguing that the lack of an adequately long-term expansion strategy for Barranquilla's water supply system did not allow a definite assessment of the immediate program. In addition, the mission was concerned about EPMB's proposal to locate the new treatment plant on the Magdalena River downstream of the city without sufficient analysis of future water quality conditions in the Magdalena River at the proposed intake location. The mission felt that it would be advisable from a technical and economical point of view to first prepare a feasibility study with the objective to define an optimal long-term expansion strategy for Barranquilla's water supply system instead of embarking on an immediate construction program which possibly would not fit into the overall plan. This global feasibility study would then become the basis for defining a first stage project in the financing of which the Bank could participate.

3.03 In addition to the water supply component, EPMB presented to the Bank mission a sewerage construction program. Preparation for this project component was further advanced than for the water supply component. Final designs for three interceptors were available, but planning for the majority of the sewerage works for which EPMB requested Bank financing was still only on a conceptual level. The Bank mission, therefore, recommended that EPMB also prepare a comprehensive feasibility study for the future expansion of the sewerage system in Barranquilla and to develop from this study a first stage sewerage construction program which could be included in the proposed project.
Table 2: Proposed Bank Lending to the Water Supply and Sanitation Sector
FY 81-85

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Proposed Borrower</th>
<th>Purpose</th>
<th>Amount (US$ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>83(S)</td>
<td>EPME</td>
<td>water supply, sewerage-Barranquilla</td>
<td>30.0</td>
</tr>
<tr>
<td>84(S)</td>
<td>INSPOFAL</td>
<td>environmental improvement</td>
<td>30.0</td>
</tr>
<tr>
<td>84(R)</td>
<td>Unidentified</td>
<td>unidentified water and sewerage</td>
<td>30.0</td>
</tr>
</tbody>
</table>

**TOTAL**                                               **90.0**

(S) Standing project  
(R) Reserve project
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<table>
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<tr>
<td></td>
<td></td>
<td>TOTAL</td>
<td>90.0</td>
</tr>
</tbody>
</table>

(S) Standing project
(R) Reserve project
3.04 EPMB agreed reluctantly with the Bank mission's recommended course of action for project preparation and has begun the process of hiring a consultant for preparing the feasibility studies for both water supply and sewerage. The Bank has reviewed the terms of reference for the feasibility studies and found them acceptable. As of this writing, EPMB has selected a consultant consortium, consisting of a joint venture of a local and an American firm and is in the process of negotiating a contract. Signature of the contract now is expected to take place before the end of August 1980, and work on the feasibility studies is anticipated to start in September 1980 and be completed by May 1981. The feasibility study will be financed from EPMB's own funds and contributions by Fondo Nacional de Proyectos de Desarrollo (FONADE).

4. Project Objectives and Relation to Sector

Project Area

4.01 Barranquilla is located on the left bank of the Magdalena River, about 20 km upstream of the River's confluence with the Atlantic Ocean. The city is the capital of the Departamento Atlántico and is the major commercial and industrial center of Colombia's Atlantic Coast region. Barranquilla, like many other cities in South America, has in the past two decades experienced a substantial population growth mainly due to immigration of generally poor people from rural areas. No reliable population figures are available for Barranquilla. It appears to be the consensus among local authorities that the current population of the city is near 1,000,000 and that the population is growing at an annual average rate of 3.3% declining from a rate of 4.7% observed in the 1960s. The population growth rate is expected to decline further in the future and stabilize at about 2.9% by 1990. Based on these growth rates, Barranquilla is projected to have 1.2 million inhabitants by 1985, 1.4 million by 1990 and 1.83 million by 2000. Much of this growth will continue to come from rural areas. If the present pattern of city expansion continues, and such a continuation is very likely, most of the housing development for low-income people will take place in the southern and southwestern parts of the city while the northern and northwestern parts of the city will continue to see urban development spring up for people in the medium to high income brackets.

Empresas Publicas Municipales de Barranquilla (EPMB)

4.02 EPMB, the potential borrower, is an autonomous municipal public enterprise responsible for the provision of a number of public services in Barranquilla: water supply, sewerage, street paving, street cleaning, garbage collection and disposal and the operation and maintenance of slaughterhouses, public parks, public markets and a zoological garden. In the past EPMB's management, operation and administrative performance have been less than satisfactory. Frequent politically motivated replacements of the General Manager and second level management have resulted in a lack of continuity in EPMB's leadership. In the last 1 1/2 years this situation has improved with the arrival of a new management team of young and energetic professionals.
Traditionally, revenues from EPMB's water supply and sewerage services have generated a surplus which was used to subsidize other deficitary services. For example, in 1978 the combined losses for five services were Co$215.7 million: street cleaning and garbage collection and disposal experienced the highest losses (Co$146.7 million), followed by street paving (Co$35.3 million), market operations (Co$13.3 million), zoological garden (Co$12.0 million) and maintenance of public parks (Co$10.2 million). During the same period water supply and sewerage services generated a net income of Co$41.2 million and the slaughterhouse operations contributed Co$30.1 million. Property and vehicle taxes, collected in lieu of tariffs for services other than water, sewerage and garbage collection and disposal, added revenues of Co$190.3 million, leaving EPMB with a net loss of Co$186.0 million for 1978. These numbers point to a precarious and unhealthy financial position for EPMB.

The new management team is trying desperately to improve the financial situation of all services but has experienced severe problems to raise tariffs to adequate levels. While financial results for 1979 are expected (official data for 1979 are not available to the Bank at the time of this writing) to be even worse than for 1978, EPMB expects definite improvements for 1980. Revenues from water supply and sewerage are expected to increase significantly from a tariff increase and the execution of a massive metering program. Likewise, increased tariffs for garbage collection and disposal, and an increase in taxes earmarked for street paving will reduce the deficits in these two services. Furthermore, EPMB is considering to sell off its interest in public markets.

The first Bank operation in the water supply and sewerage sector in Barranquilla was Loan 1072-20 under which US$10 million were being made available to assist in the financing of a water supply and sewerage improvement and expansion program. The loan is being channelled through IDB/PAL. The performance of EPMB and INFSOPAL in the implementation of the Barranquilla sub-project has been plagued with excessive delays and subsequent cost overruns caused by inadequate project preparation and definition at appraisal, by poor management of both EPMB and INFSOPAL and at times by the Colombian Government's failure to provide the pledged counterpart funds in a timely fashion. In 1976 the project scope was changed with the concurrence of the Bank's resident water supply specialist in response to a request from the Colombian Government. At that time the sewerage component of the project was drastically reduced in favor of an expansion of the production capacity of the existing water treatment plant to cover unsatisfied water demands in Barranquilla. So far, the changes in project description have been de facto accepted by the Bank, but have not yet been acknowledged formally and not incorporated into the documents of Loan 1072-20. The Bank has requested INFSOPAL to prepare a justification of the changes in project description in Barranquilla so that the loan documents can be amended accordingly.

The execution of the Barranquilla sub-project is currently running about two years behind the schedule envisioned at appraisal. Since the new EPMB management took office in the beginning of 1979, EPMB is making a strong
effort to complete the project. As of March 31, 1980, about 50% of the projected investment under Loan 1072-00 has been completed. To complete the project about Col$635 million (US$15 million) worth of construction remain to be invested. About 50% of this outstanding investment is firmly committed. EPMB expects to complete all water supply works by mid-1981 and the sewerage works by the end of 1981.

Water Supply Service Levels

Water to the city of Barranquilla is supplied from the Magdalena River through a treatment plant with a current average capacity of around 3.4 m³/sec. At the end of 1979, EPMB serviced and billed 79,300 connections (70,000 domestic and 9,300 industrial/commercial). The domestic house connections provide about half of Barranquilla’s population with piped water. Most of the people without access to piped water belong to the urban poor which have settled at the fringes of the city. EPMB’s billing records for 1979 indicate a daily per capita consumption of domestic consumers of 235 l, which is unrepresentative since substantial under-billing of nonmetered customers (as of October 1979 only 18% of domestic connections were metered) is apparent. During 1979 the percentage of unaccounted-for water was about 42%. This percentage is high and can be explained mostly by under-billing of nonmetered connections, a large number of illegal connections, and physical leakage in the system.

4.08 Even if EPMB would be able to reduce water losses to a reasonable level, the current capacity of the treatment plant is insufficient to provide the people of Barranquilla with an adequate water supply. In addition, inadequate transmission and storage capacities in the distribution system make service to existing connections quite erratic and water rationing is practiced throughout the city.

4.09 The completion of water supply works financed under Loan 1702-00 will bring some relief to the strained water supply situation in Barranquilla. The increase in treatment capacity to 4.8 m³/sec and the construction of transmission mains, and increases in pumping and storage capacities in various parts of the city will alleviate water rationing in the central parts of the city for the next two to three years and will allow the connections of an as yet unknown but limited number of new customers. These improvements, however, will not ameliorate water supply services to the areas located at the periphery of the city where most of the urban poor live.

Sewerage Service Levels

4.10 Barranquilla’s sewerage system, approximately 180 km long, serves about 435,000 people (43.5% of the total population) living in the center and more affluent sections of the city. All of the sewage enters the Magdalena River untreated. Since the flow in the Magdalena River (minimum flow observed is 1,700 m³/sec) is quite low, no major water quality problems in the river.
have been observed under present waste load conditions. Due to the insuffi-
cient capacity of the sewer interceptors in some areas of the city, several of
the open storm water drainage canals receive substantial overflows from
sanitary sewers leading to unsanitary conditions. Sewer system improvements
financed under Loan 1072-00 will strengthen services in the center of the city,
but will not bring services to the large portion of Barranquilla which cur-
rently is unserved.

Project Objectives

4.11 The fundamental objective of the project would be to upgrade health
and living conditions, primarily to the low-income segment of Barranquilla's
population, through the provision of new or improvement in existing water
supply and sewerage services. Another objective would be to upgrade the
viability and performance of Barranquilla's public utility (EPMB). Specific
objectives of the project would be the following:

(a) expansion of water treatment, transmission and storage capac-
ities to bring an adequate and safe water supply to 90% of
Barranquilla's population by 1990;

(b) expansion of the sewerage system with the goal to provide sewer-
age connections to 70% of Barranquilla's population by 1990;

(c) improvement of EPMB's technical, operational, organizational
and administrative capability through a technical assistance
program and

(d) improvement of EPMB's financial viability through a combination
of more efficient operation and adequate tariffs.

4.12 These project objectives are fully consistent with government pro-
grams in the urban and social sectors for the improvement of living conditions
of the poor. The Government, EPMB, and the Bank are in agreement as to the
project objectives and their desirability.

5. Project Description

5.01 The definition of the project is the objective of a feasibility
study, which at the time of this writing is about to be initiated. Therefore,
only preliminary estimates regarding individual project components and costs
can be provided. The project would include three basic components: water
supply works, sewerage works, and a technical assistance program for EPMB.

5.02 The water supply component would include:

(a) expansion of Barranquilla's water treatment capacity by about
4.6 m3/sec to 9.4 m3/sec to meet expected 1990 demands;

(b) construction of water transmission, storage, pumping and
distribution facilities; and
(c) purchase and installation of water meters.

5.03 The sewerage component, at this stage somewhat better defined than the water supply component, would include the construction of:

(a) 12 interceptors of about 45 km length;
(b) secondary sewer network with house connections;
(c) sewage pumping stations; and
(d) oxidation pond.

5.04 The technical assistance would include:

(a) consulting services designed to strengthen EPMS's performance in areas such as unaccounted-for water control, organization, technical and financial planning, accounting, billing and collection and tariff formulation;
(b) a water treatment plant and network operator training program;
(c) consulting services for final design of project components; and
(d) consulting services assisting EPMS in the supervision of construction and execution of the project and providing training to EPMS professional technical personnel.

**Project Cost**

5.05 The definition of the project is not advanced sufficiently to allow the estimate of project costs to any degree of reliability. Estimating that the water supply component would cost US$925 million and the sewerage component US$44 million (estimates at 1979 price level) and assuming project execution during the 1982-85 period, the following very preliminary breakdown of costs can be offered:

<table>
<thead>
<tr>
<th>Component</th>
<th>Local a/ Cost</th>
<th>Foreign b/ Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(US$ Millions)</td>
<td>(US$ Millions)</td>
<td></td>
</tr>
<tr>
<td>Water Supply</td>
<td>27</td>
<td>18</td>
<td>45</td>
</tr>
<tr>
<td>Sewerage</td>
<td>15</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Technical Assistance</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>30</td>
<td>73</td>
</tr>
</tbody>
</table>

*Including price contingencies, taking into account price and exchange rate projections according to Memo of July 3, 1980 by G. Gebhardt, Economist, LEC.

*b/ Including price contingencies assuming inflation rates of 10.5%, 9%, 8%, 7%, and 7% for the years 1980 through 1985, respectively.*
Financing

5.06 Following the Bank's lending strategy for other sector projects in Colombia, the Bank would finance the foreign exchange cost of the project, i.e. about US$30 million. The Colombian Government and EPMB would have to provide the local cost component of about US$43 million, of which about US$11 million (about 25%) would come from EPMB's internal cash generation.

Project Beneficiaries

5.07 Again, since the project scope is not yet known, only very general estimates on the number of people who are expected to benefit from the project can be made. If the project goal as stated in para. 4.11 (water supply: 90% of people by 1990; sewerage: 70% of people by 1990) will be reached, the project will contribute to bringing water supply services to about 800,000 and sewerage services to about 500,000 existing and future residents of Barranquilla. In 1985, the projected year of project completion, the project would provide new water supply and sewer connections for about 300,000 people and would improve services to existing connections. Most of the people to benefit would belong to the low-income segment of the population.

6. Main Project Issues and Recommendations

Issue: Project Preparation

6.01 The definition of scope and costs depends largely on the results of a feasibility study, for which EPMB is currently negotiating a contract. The future schedule of project preparation depends on the rate of progress that will be made in the execution of this feasibility study. Since the preparation of the feasibility study is out of the Bank's control, any scheduling of the Bank's preparation process is uncertain at this time.

Recommendation

The Bank should request EPMB to forward the consultant's progress reports, thus enabling the Bank to monitor the progress made in the execution of the feasibility study. Such regular monitoring would not only assist the Bank in its programming concerning the preparation of the Barranquilla Project, but would also ensure that the feasibility study generates results adequate for project appraisal purposes.

Issue: Recipient of Loan for Proposed Project

6.02 Currently, Bank funds for the ongoing works in Barranquilla financed through Loan 1072-CA are channelled through INFEOPAL. EPMB has requested that a future Bank loan be made directly to EPMB, citing as a reason INFEOPAL's less than satisfactory administration of the Barranquilla subproject. Lending directly to EPMB would indeed be more efficient and give the Bank a greater
LeVERAGE in supervising the project. INSPOPAI has indicated that it would be willing to accept EPMB's request for independence from INSPOPAI, as it has done previously with other large Colombian cities in the past (Bogota, Medellin, Cali, and Palmira).

**Recommendation**

A Bank loan for the proposed project in Barranquilla should be made directly to EPMB.

**Issue: Technical Capacity of EPMB**

6.03 In spite of its present lack of technical capabilities, EPMB would be able to carry out successfully the proposed project. It would be imperative, however, that EPMB be assisted in this endeavor by experienced and capable consultants. Close cooperation between the consultants and EPMB personnel would provide EPMB with an opportunity to gain valuable experience in the preparation, execution, and administration of future large scale construction programs.

**Recommendation**

EPMB should for construction supervision and administration of the project engage the services of capable engineering consultants. These consultants should also assist EPMB in the creation of a competent technical in-house staff.

**Issue: Institutional Capacity of EPMB**

6.04 As stated before (para. 4.02), EPMB is a weak institution which needs extensive assistance in almost all areas of public utility organization and management.

**Recommendation**

The Bank should require that a comprehensive institution building program be included in the proposed project. To clearly define the components of such a program, a diagnosis of EPMB's institutional status and needs for improvement should be made during project preparation and at appraisal.

**Issue: Cross-Subsidization of EPMB Services**

6.05 Traditionally, EPMB's water and sewerage services have generated a cash surplus which has been used to subsidize other EPMB services producing deficitary results (garbage collection and disposal, street pearing, operation of public markets, a zoological garden and maintenance of parks). Bank financing of the proposed project would require that this practice be discontinued.
Recommendation

Bank financing of the project should be made contingent on EPMB's commitment to implement a plan of action which would make each service self-sufficient and end the practice of intra-service subsidization.

Issue: Financial Capacity of EPMB

6.06 So far, no detailed analysis and projections are available to the Bank for judging EPMB's financial capacity to contribute to the project. To this effect, preliminary financial projections indicating EPMB's revenue needs to cover its share of the proposed project, other investments, debt service, and working capital requirements are needed for the 1981-90 period.

Recommendation

Bank financing of the project should be made contingent on EPMB's commitment to generate revenues sufficient to cover an adequate EPMB contribution to the project after payment of operating and debt service costs. The size of EPMB's contribution (perhaps 25% of the local project cost component) should be discussed and determined during future preparation missions.

Issue: Completion of Works Financed Under Loan 1072-CD

6.07 EPMB is a beneficiary of Loan 1072-CD, which provides US$10 million towards the expansion of the water supply and sewerage system in Barranquilla. Currently, project execution is about two years behind schedule and investments worth Col$653 million remain to be realized before the end of 1981.

Recommendation

Bank participation in the proposed project should be made contingent on reasonable progress made by EPMB in the construction of the works under Loan 1072-CD and on a reasonable fulfillment of the covenants contained in the on-lending agreement between INSPFPAL and EPMB.

Issue: Change in Project Description of Loan 1072-CD

6.08 During the execution of Loan 1072-CD, the technical content of the Barranquilla subproject has been changed substantially. Several main sewage collectors were deleted from the project in 1976 in order to free funds for the construction of additional water treatment plant capacity. EPMB considers to include the construction of these interceptors into the proposed project. It is, therefore, a prerequisite for Bank financing of the proposed project that the documents for Loan 1072-CD be amended to reflect the changed objectives of the Barranquilla subproject. Beginning in February 1980, the Bank has asked INSPFPAL repeatedly to provide the documentation and justification necessary for making the amendment to the loan documents. So far, INSPFPAL has not been able to furnish adequate information regarding this matter.
Recommendation

The Bank should insist and urge INEFOPAL to prepare adequate documentation and justifications for the changes in the project descriptions of all subprojects covered under Loan 1072-CO.

Issue: Inefficient Operation of Water Supply Services

6.09 The current high percentage of unaccounted-for water (42%) violates a condition contained in the onlending documents for Loan 1072-CO which specifies an unaccounted-for water target of 28% for 1978. The present high rate is primarily caused by under-billing of unmetered connections, the existence of a substantial number of illegal connections and leakage of water from the network. For an efficient operation of Barranquilla's water supply system, it is imperative that the percentage of unaccounted-for water be reduced to a reasonable level. Currently, EPMB is carrying out a leak detection and repair program and a massive meter installation and repair project with the objective to meter all of its connections by the end of 1981. Therefore, there is reason to believe that EPMB will reduce the percentage of unaccounted-for water to an acceptable level by the end of 1981.

Recommendation

To encourage EPMB's efforts to increase the efficiency of its water supply operation, the Bank should make loan effectiveness for the proposed project contingent on a reduction of the percentage of unaccounted-for water to 28%, as required by Loan 1072-CO.

Issue: Financing of Final Designs for Proposed Project

6.10 Financing for the preparation of the water supply and sewage feasibility studies comes from EPMB's own sources and contributions from FONABE. EPMB has asked the Bank if financing for the preparation of final designs could be provided from the proposed Bank loan. Since work on the preparation of final designs is expected to begin well before loan signature, Bank participation in the financing of final designs would necessitate either retroactive financing for this project component or making use of the project preparation facility.

Recommendation

The Bank should consent to EPMB's request and include financing of the preparation of final designs of the project into the proposed project. Whether for this purpose the project preparation facility or retroactive financing should be utilized will have to be decided during future negotiations between the Bank and EPMB.

7. Critical Path For Project Preparation

7.01 A summary of activities to advance project preparation to appraisal is indicated below. Please note that the preparation of the feasibility study is the critical activity in the sequence of activities leading to appraisal.
As this activity is outside the control of the Bank, any of the dates estimated below are subject to considerable uncertainty.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) signature contract feasibility study</td>
<td>8/80</td>
<td>EPMB</td>
</tr>
<tr>
<td>(b) begin work on feasibility study</td>
<td>9/80</td>
<td>EPMB</td>
</tr>
<tr>
<td>(c) first preliminary results feasibility study</td>
<td>12/80</td>
<td>EPMB</td>
</tr>
<tr>
<td>(d) preparation mission</td>
<td>12/80</td>
<td>Bank</td>
</tr>
<tr>
<td>(e) amendment project description</td>
<td>12/80</td>
<td>INSPOPAL/Bank</td>
</tr>
<tr>
<td>(f) preparation mission</td>
<td>4/81</td>
<td>Bank</td>
</tr>
<tr>
<td>(g) compilation first draft feasibility study</td>
<td>5/81</td>
<td>EPMB</td>
</tr>
<tr>
<td>(h) commitment government to project</td>
<td>5/81</td>
<td>Colombian Government</td>
</tr>
<tr>
<td>(i) begin preparation final designs (retroactive financing or use of project preparation facility)</td>
<td>6/81</td>
<td>EPMB</td>
</tr>
<tr>
<td>(j) appraisal mission</td>
<td>6/81</td>
<td>Bank</td>
</tr>
</tbody>
</table>

8. Project Organization and Implementation

8.01 EPMB would be capable of executing the project with the assistance of qualified and experienced consultants who would be responsible for: (a) preparation of final designs for the proposed project; (b) supervision and inspection of construction; and (c) administration of the project and procurement matters. The consultants would be supervised by EPMB’s Technical Department. For this purpose, it would be necessary that EPMB strengthen its technical staff by the addition of some experienced and qualified engineers. Assuming that project preparation would proceed as delineated in paragraph 7.01, project implementation would extend through the 1982 to mid-1985 period. Implementation schedules would be agreed upon during project preparation and appraisal.
9. Intra-Bank Coordination and Manpower Planning

9.01 The project preparation schedule calls for two preparation missions prior to appraisal. The preparation mission should be staffed by an engineer and a financial analyst requiring a total commitment of three man-months. The appraisal mission should consist of an engineer, a financial analyst, an economist, and a specialist in urban poverty analysis. The appraisal mission would require a minimum of three weeks in the field. Manpower requirements for completing the appraisal work is estimated at eight man-months. Bringing to 11 the total amount of man-months needed to complete the preparation and appraisal of the proposed project for Barranquilla. At this time, it appears that only LCPUS staff is needed to complete project preparation and appraisal and that there aren't any manpower constraints. Assuming that appraisal can take place by mid-1981, the lending documents should be ready for submission to the Board in March 1982.

10. Status of Dialogue With Borrower and Government

10.01 The dialogue between the Bank, EPMB, and the Colombian Government is still at an early stage and the discussions between the parties involved have been predominantly of an exploratory nature. The preparation mission which visited Barranquilla in February 1980 received from EPMB a written request for Bank financing for the proposed project (Annex I). EPMB's desire to seek assistance from the Bank has been confirmed by EPMB's subsequent decision to carry out feasibility studies for water supply and sewerage following the Bank's recommendations.

10.02 Previous Bank preparation missions had discussions with the Mayor of Barranquilla and the Governor of the Departamento del Atlantico who both voiced support for a future Bank project in Barranquilla. INSUVAL also agreed to support the project and verbally had indicated its willingness to allow EPMB to seek a direct loan from the Bank without INSUVAL involvement. The Bank Resident Representative has held exploratory discussions with the National Planning Department (DNP) which confirmed the high priority of a Barranquilla project and indicated its willingness to support the project with the provision of counterpart funds. So far, a formal endorsement of the project by the National Government is still outstanding, but will undoubtedly come forward at a later date, when project preparation reaches a more advanced state. For the
time being, it is recommended that the Bank Resident Representative continue to
discuss the proposed project with the National Government and obtain from OPM a
commitment in principal confirming the high priority of the proposed project
and assuring that the National Government is prepared to provide sufficient
counterpart funds to the proposed project.

Project Brief prepared by: W. Stottmann

cc: Meesra, van der Meer, LCPR; Lerda, LCPR; Pfoffermann, LCNPV;
Lery, LC2DR; Carter, LC2DR; Wessels, LCPR; Pavilla, J, LC2DS;
Luc coma, LC2DN: Rajagopal, S, PAS; Willoughby, S, TFW;
Buxy, TFW; Zavala, LCPS; Chittleburgh, EDC; Rosh, LCPS
Ms. DeWan, LCPS; LAC Files, Division Files

WStottmann:js
Soñado

BANCO MUNDIAL

At. Ingeniero Walter Stottmann

Washington D. C.

Apreciado señor Stottmann:

Tengo el honor de notificarles que a principios de este mes, después de varias conversaciones en Bogotá con la subcomisión del Banco Interamericano de Desarrollo, recibimos que decidimos seguir adelante en nuestra solicitud de un nuevo préstamo, para la construcción de una nueva planta de tratamiento a escala saludable, en la ciudad. A las introducidas en las instalaciones de la institución financiera, le informamos que hemos decidido continuar con la solicitud del Banco Mundial ya que, aunque las condiciones financieras son atractivas, con ustedes obtenemos menos tiempo en la concesión de estudios y evaluación de posibles, debido a que ustedes ya conocen nuestra estructura actual y sobre todo nuestra urgencia sanitaria.

En consecuencia, haces a Ustedes la solicitud formal para obtener la financiación para la construcción de la nueva planta de tratamiento "Las Flores", como también del sistema de alcantarillado necesario.

El Gobierno nacional ha dado su autorización a esta solicitud.

De Ud. con mayor cordialidad,

[Signature]

[Stamp]

[Stamp]
URGE OTORGAMIENTO GARANTIA PAGO BANCO MUNDIAL CARTA CREDITO NUMERO 8047280268-3 THE BANK OF TOKYO LTDA JAPON SUMINISTRO BOMBA WQUA CRUDA BARRANQUILLA LISTA PWARA EMBARQUE AGOSTO 20 PUNTO HACERACEMOS AGILIZAR LAS PARA DIENESTAR BARRANQUILLA PUNTO EMPRESAS PUBLICAS MUNICIPALES

COL 1810 H STREET NW 8047280268-3 20

EMILIO RODRIGUEZ
BANCO MUNDIAL
NUMERO 1810 H STREET NW
WASHINGTON DC 20433
Empresas Publicas Municipales

Barranquilla, Agosto 10 de 1,980
GER. No. 004520

Señores
Banco Mundial
Attn. Dr. Emilio Rodríguez

Según nos ha informado el fabricante la Bomba para agua cruda que están adquiriendo las Empresas Públicas Municipales bajo el Contrato No. 093 se encuentra lista para embarque en Agosto 20, sin que hasta la fecha haya sido posible al fabricante obtener ningún pago al respecto por falta de la garantía del Banco Mundial otorgada al Banco correspondiente sobre el pago de la Carta de Crédito solicitada en desarrollo de ese Contrato.

Dado su conocimiento del problema de Barranquilla nos permitimos solicitarle realizar todos los esfuerzos posibles con objeto de agilizar el otorgamiento por parte del Banco Mundial de dicha garantía de pago.

Atentamente,

EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA

JAIMÉ DEVIS PEREIRA
Gerente

cc. Sub. F. T. y A.F.
SEÑOR JAIME DEVIS PEREIRA, GERENTE
EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA
BARRANQUILLA, COLOMBIA. PARA ELABORACION PREPARACION
INFORMACION BASICA DEL PROYECTO QUISIERAMOS RECIBIR
INFORMACION ESTADO DE IMPLEMENTACION ESTUDIOS DE FACTIBILIDAD
PROYECTOS PARA AGUA POTABLE Y ALCANTARILLADO, EN PARTICULAR
FECHA DE LA ADJUDICACION, NOMBRE CONSULTOR SELECCIONADO,
PROGRAMA DE EJECUCION DEL ESTUDIO HASTA TERMINACION.
SALUDOS, STOTTMANN, INTBAFRAD.
JAIME DEVIS PEREIRA, GERENTE GENERAL, EMPRESAS PÚBLICAS MUNICIPALES DE BARRANQUILLA, BARRANQUILLA, COLOMBIA

EN OCASIÓN DE SU VISITA Y DE ACUERDO A NUESTRA CONVERSACIÓN DEL 28 DE ABRIL Y A NUESTRAS CARTAS DE FEBRERO 1 Y ABRIL 24 1980, QUEREMOS RECORDARLE QUE PARA QUE EL BANCO CONSIDERE NUEVO PRESTAMO DE PROYECTO AGUA Y ALCANTARILLADO ES NECESARIO QUE EMPRESAS PÚBLICAS MUNICIPALES (EPMU) MEJOREN LA RENTABILIDAD DE TODOLOS SERVICIOS PÚBLICOS QUE PRESTAN, ADECUANDO LAS TARIFAS PARA OBTENER UNA RENTABILIDAD QUE NO SOLO CUBRA GASTOS DE OPERACION Y MANTENIMIENTO SINO QUE PERMITA A EPMU CONTRIBUIR UN PORCENTAJE DE LOS COSTOS DE LA INVERSION DE LAS OBRAS A SER FINANCIADAS. SALUDOS ALFONSO ZAVALA. INTABRADEC.
April 24, 1980

Dr. Jaime Davis Pereira
Gerente General
Empresas Publicas Municipales de Barranquilla (EPMB)
Calle 32, No. 44-66
Barranquilla, Colombia

Dear Dr. Pereira:

RE: Barranquilla Water Supply and Sewerage Project

We wish to extend to you and your staff our sincerest appreciation for the courtesies and attention given to Mr. Stottmann during his visit to Barranquilla in February 1980. We are pleased to learn of EPMB's decision to seek the Bank's financial assistance for the proposed Barranquilla water supply and sewerage project.

As you know, the project appraisal can only start after the results of the feasibility study which you are about to begin become available. Therefore, it is in EPMB's interest to get this study under way and completed as soon as possible. Please keep us informed of your progress in hiring consultants for the study, and once work on the study has begun, send to the Bank the consultant's monthly progress reports. This way, we can monitor the progress of the study and decide when sufficient results are available for project identification. In accordance with the timetable you discussed with Mr. Stottmann, we hope that progress of the feasibility study will advance sufficiently to undertake a major project preparation mission towards the end of 1980.

In the meantime we urge you to complete all works financed under Loan 1072-CO before the end of 1980. As you know, the Bank can only consider a loan to EPMB after reasonable progress of the Barranquilla subproject under Loan 1072-CO. In addition, it will be necessary to amend the loan documents to reflect the changes in the project scope which have been made during the execution of Loan 1072-CO. At this time, INEROPAL is preparing the documentation necessary for justifying these changes in project scope. We urge you to support and cooperate with INEROPAL in order to formalize the changes as soon as possible. In addition, the Bank expects reasonable compliance with the covenants contained in the onlending documents before the new loan can be made.

While the new water and sewerage system expansion project is being prepared, we encourage you to continue your search for improvements of your existing system. We feel that your most recent idea to possibly utilize the Puerto Colombia Treatment Plant as an auxiliary water source

OFFICIAL FILE COPY
for the northern part of Barranquilla is quite promising and should be pursued further. We also support your plan to improve the output of the existing plant and agree that a general revaluation of the plant's operation and the development of plans to boost the plant's capacity to its original design level are necessary. Regarding consultant services for the evaluation of the treatment plant, we would like to recommend that you engage the services of a qualified and independent specialist who has been involved neither in the original design of the plant nor in the current plant optimization work. This way, you can obtain an unbiased opinion on the state of operation of the plant. We have no objections that the consultant services concerning the study of the treatment plant be financed from the proceeds of Loan 1071-CD. We also support a plant operator training program. We advise you to contact INSPOMAL regarding these matters.

The provision of counterpart funds from the Colombian Government is essential for a Bank loan to EPMB. We suggest, therefore, that you initiate as soon as possible a dialogue with the Departamento de Planeacion Nacional (DPM) with the objective to arrive at an early understanding with DPM concerning the availability of counterpart funds.

Please keep us informed of all new developments concerning the proposed project. Do not hesitate to contact us should you have any questions. Hoping for a successful cooperation in our joint efforts to improve water and sewerage services for the people of Barranquilla, we remain,

Sincerely yours,

Alfonso Zavala,
Chief
Water Supply and Sewerage Division
Latin America and the Caribbean Region

cc: Instituto Nacional de Fomento Municipal (INSPOMAL)
Bogota, Colombia
Cleared with and cc: Mr. Lecuona (LC2BB)
cc: Gutierrez, LAPCL; Collei, LEG;
WStottmann: js Ws

OFFICIAL FILE COPY
Given the interest shown by the Barranquilla Municipal Public Enterprises (EPMM) obtaining bank financing for the proposed project (Annex I) and their intention to hire consultants this month for project preparation, it is proposed to change the status of this project in the lending program from the present PYE2 to a full PYE3 operation once the hiring of consultants is confirmed. Consequently, the mission is proposing a preappraisal mission by the end of 1980 (para. 6) and an identification mission that should take place by August-September in the current year.

FROM (SIGNATURE OF DIVISION CHIEF OR DEPUTY)  
Alfonso Zavala, Chief, LCPWS  
DATE  
April 7, 1980

FOOTNOTES:

a. Dates by which draft letters (see annex number) would be issued if no comments are received (see LCP Director’s Memo No. 14, Revised Addendum).

b. Where points are flagged to or guidance sought from persons in the Central Projects Staff (CPS) or Projects Advisory Staff (PAS), their names should be noted.

c. State if the report raises any issues. If so, indicate relevant paragraph numbers, and/or briefly describe the issues involved.
OFFICE MEMORANDUM

TO: Mr. Alfonso Zavala, Chief, LCP/NS
FROM: Walter Stottmann, EGR, LCP/NS
DATE: April 7, 1980
SUBJECT: COLOMBIA—Proposed Barranquilla Water Supply and Sewerage Project—
Preparation Mission
Back-to-Office and Full Report

Introduction

1. In accordance with terms of reference dated February 22, 1980 I spent one week in Barranquilla from February 25 - 29, 1980 discussing with officials of the Empresas Publicas Municipales de Barranquilla (EPMB) the status of the proposed water supply and sewerage project. This has been the second mission to Barranquilla regarding the proposed water supply and sewerage project. The first mission’s report was published on January 11, 1980.

Summary of Findings

EPMB’s Decision to Seek Bank Financing for the Project

2. Following extensive discussions with the Banco Interamericano de Desarrollo (BID) and the Departamento de Planeación Nacional (DPN), EPMB in early February decided to seek Bank financing for the expansion of its water supply and sewerage system. A letter from EPMB indicating this decision is attached as Annex 1. It should be noted that EPMB in its letter to the Bank is referring specifically to the construction of a new treatment plant at Las Flores, but EPMB is now prepared to drop this solution, if the upcoming studies should recommend a more cost efficient expansion strategy for Barranquilla’s water supply system.

3. EPMB agreed to follow the recommendations made by the previous mission concerning project preparation and is prepared to launch by June 15 a feasibility study covering both water supply and sewerage. The main objectives of this study will be to develop a long-range strategy for Barranquilla’s water supply and sewerage system expansion and the preparation of a first stage project for which Bank financing is being requested. While the feasibility study is being prepared, EPMB will carry out a series of emergency measures designed to alleviate some of the most urgent water supply shortages presently existing in some parts of Barranquilla (Annex 3).

4. While in Barranquilla, I was received by the Governor of the Departamento del Atlantico, who expressed his support for EPMB’s plan and promised to do “his best” in securing counterpart funds from Colombia’s national government. He indicated that Colombia’s President is giving high priority to the Barranquilla project and has declared this in public. So far, EPMB has not yet initiated a dialogue with the Departamento de Planeación Nacional (DPN) concerning the government’s provision of counterpart funds but will do so soon. Mr. Gutierrez, the Bank’s Resident Representative in Bogotá, who has been informed of the findings and recommendations of the mission, will meet with DPN to discuss the priority given by the Colombian government to the proposed Barranquilla project.
Feasibility Study and Project Preparation

5. While in Barranquilla, I discussed in detail with EPMB’s management the terms of reference for the feasibility study. The main steps of the feasibility study covering both water supply and sewerage are briefly outlined below:

(a) inventory and technical evaluation of existing systems, including works financed under Loan 1072-DO; (a project execution summary under this loan is presented as Annex 4);

(b) projection of future population, water consumption, demands, etc.;

(c) development of system expansion alternatives to meet demand in the year 2000;

(d) development of system expansion strategies and the technical and economical evaluation of alternatives. In this evaluation, the water quality in the Rio Magdalena and the integration of new and existing facilities will receive particular attention; and

(e) identification of a first stage construction program to meet demand until 1995 with a detailed description of all system components and the preparation of reliable cost estimates.

The results obtained in step (e) of the feasibility study would become the basis for the proposed project. After completion of the feasibility study with step (e), EPMB considers to retain the consultants contracted for the feasibility study to prepare final designs for the construction program identified.

6. EPMB intends to keep to the following timetable for consultant selection and the preparation of the study:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Target Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of short list and sending off requests for proposals</td>
<td>First week of March</td>
</tr>
<tr>
<td>Opening of proposals</td>
<td>April 8</td>
</tr>
<tr>
<td>Selection of consultant</td>
<td>April 20</td>
</tr>
<tr>
<td>Signing of contract</td>
<td>May 15</td>
</tr>
<tr>
<td>Beginning of work</td>
<td>June 15</td>
</tr>
<tr>
<td>First draft of feasibility study</td>
<td>November 15</td>
</tr>
</tbody>
</table>
This first draft would delineate project scope and cost in sufficient detail to allow project preappraisal. Consequently, the next mission to Barranquilla could take place near the end of 1980 and, barring major problems, project appraisal could be expected for early 1981. After completion of the feasibility study, consultants would be retained to prepare final designs so that construction could be initiated immediately after the Bank loan becomes effective.

7. EPMB will keep the Bank informed of all progress made in the process of the hiring of consultants. Once work on the feasibility study is under way, EPMB will forward the consultant's monthly progress reports to the Bank, thus giving the Bank a chance to monitor progress in the preparation of the project.

8. EPMB is seeking financing for the feasibility study and the preparation of final designs from Fondo Nacional de Proyectos de Desarrollo (FONADE). So far, FONADE has approved the terms of reference for the study and has expressed its willingness to finance the study. EPMB realizes, however, that contracting for consulting services by May 15, 1980 would not be possible if regular FONADE procedures were followed. In view of the urgency to get the work on the feasibility study under way, EPMB is prepared to finance at least part of the consultants' fees from its own resources and then to apply for retroactive reimbursement from FONADE.

Project Components

9. Only preliminary estimates of the project components and cost can be made at this stage. The project would include a water supply and sewage component and a technical, administrative and management assistance program to improve EPMB's institutional capabilities. The water supply component would probably include the construction of:

(a) a new water treatment plant with a capacity of around 1.5 m³/sec;
(b) transmission mains and distribution network;
(c) one or two water storage tanks; and
(d) purchase of water meters.

The cost of the water supply component probably will be in the US$25-30 million range. The sewage component, which at this time is somewhat better defined than the water supply component, would include the construction of:

(a) 12 interceptors with a combined length of approximately 45 km;
(b) a sewage pumping station; and
(c) an oxidation pond.
The total cost of the sewerage component probably will be around US$15 million. Consequently, a very preliminary cost estimate for the proposed Barranquilla water supply and sewerage project would be US$45 million at February 1980 prices and excluding contingencies.

Recommendations for Further Action

10. Now that EPMB has decided to seek Bank financing for the proposed water supply and sewerage project and has agreed with the previous mission’s suggestion to perform a feasibility study in preparation of the project, the Bank should take the following actions to contribute to a speedy completion of the preparation work towards appraisal:

(a) monitoring progress of the feasibility study by reviewing the consultant’s monthly progress reports which will be sent to the Bank by EPMB; depending on the progress of the study, the date of the project identification mission can be scheduled;

(b) obtaining by DPW confirmation of the priority of the project and assurances regarding timely provision of government counterpart funds for the proposed project; the Bank’s resident representative in Bogotá should be requested to follow up on these matters; and

(c) resolving with INSPINAL the issues regarding the change in project description under Loan 1072–CO and amending the loan documents for Loan 1072–CO accordingly.

11. EPMB’s actions in the near future should include the following:

(a) completing the remaining works under Loan 1072–CO in a reasonable fashion by the end of 1980;

(b) demonstrating compliance with loan covenants stipulated under Loan 1072–CO by the end of 1980;

(c) hiring consultants to prepare the feasibility study and completing the study as indicated in para. 6;

(d) hiring of an independent consultant satisfactory to the Bank with the objective to re-evaluate the operation of the existing treatment plant and to identify measures necessary to increase the output of the treatment plant to the design level;

(e) investigating, and if technically and financially feasible, implementing the emergency plan of utilizing the Puerto Colombia water treatment plant as a supplementary water source for the northern part of Barranquilla; and
(f) keeping the Bank informed of all developments regarding the proposed project.

A letter (Annex 2) should be sent informing EPMG of the above actions.

cc: Messrs. van der Meer, LCFOR; Vessels, LCFOR; Favilla, LC2DB; Lecuona, LC2DB;
Costa, LCFWS; Rajagopalan, (3) FAS; Wiloughby (3), TWT;
Chittleburgh, EDC; Colleni, LEG; Grothe, CTR; Guzman, LAFCI

Ms. DeVau, LCFWS; LACIC; Division Files
List of Annexes

Annex 1 - Letter dated February 26, 1980 from EPMS
Annex 2 - Draft Letter to EPMS
Annex 3 - Water Supply Emergency Construction Program
Annex 4 - Project Execution and Compliance With Loan Conditions Under Loan 1072-00
Pedir en $1,000

SEK 1 M.

Sólo

MA-190 MATERIAL

Alto Ingeniero Walter Stollmann

Washington D.C.

Apreciado señor Stollmann:

Fui a Lima revisando las primeras de este año, después de la renuncia del Ing. Pérez, en la construcción del sistema de construcción de la Planta de Reciente. A las mencionadas cosas de la instalación que hemos hecho, decidimos terminar con la instalación del plano de 100, aunque las condiciones económicas son indignas, con el uso de refinamientos menos tiempo en la conclusión de estudios y realización de créditos, debido a que ustedes ya conocen nuestra estructura actual y sobre todo nuestra urgencia.

En consecuencia, hemos a Ustedes la solicitud formal para levantar la financiación para la construcción de la nueva planta de "Las Flores", como tendencia del sistema de refinamiento necesario.

El Gobierno peruano ha dado su aprobación a esta solicitud.

Le dedico muy cordialmente,

[nombre firma]

[Fecha]

[Signatura]
Dear Dr. Pereira:

RE: Barranquilla Water Supply and Sewage Project

We wish to extend to you and your staff our sincerest appreciation for the courtesies and attention given to Mr. Stottmann during his visit to Barranquilla in February 1980. We are pleased to learn of EPMB's decision to seek the Bank's financial assistance for the proposed Barranquilla water supply and sewage project.

As you know, the project appraisal can only start after the results of the feasibility study which you are about to begin become available. Therefore, it is in EPMB's interest to get this study under way and completed as soon as possible. Please keep us informed of your progress in hiring consultants for the study and, once work on the study has begun, send to the Bank the consultant's monthly progress reports. This way, we can monitor the progress of the study and decide when sufficient results are available for project identification. In accordance with the timetable you discussed with Mr. Stottmann, we hope that progress of the feasibility study will advance sufficiently to undertake a major project preparation mission towards the end of 1980.
In the meantime we urge you to complete all works financed under Loan 1072-CO before the end of 1980. As you know, the Bank can only consider a loan to EPMB after a reasonable completion of the Barranquilla subproject under Loan 1072-CO. In addition, it will be necessary to amend the loan documents to reflect the changes in the project scope which have been made during the execution of Loan 1072-CO. The Bank has already started communications with INSUGFAL towards formalizing these changes. In addition, the Bank expects reasonable compliance with covenants contained in the onlending documents before the new loan can be processed.

While the new water and sewerage system expansion project is being prepared, we encourage you to continue your search for improvements of your existing system. We feel that your most recent idea to possibly utilize the Puerto Colombia Treatment Plant as an auxiliary water source for the northern part of Barranquilla is quite promising and should be pursued further. We also support your plan to improve the output of the existing plant and agree that a general reevaluation of the plant's operation and the development of plans to boost the plant's capacity to its original design level are necessary.

Regarding consultant services for the evaluation of the treatment plant, we would like to recommend that you engage the services of a qualified and independent specialist who has been involved neither in the original design of the plant nor in the current plant optimization work. This way, you can obtain an unbiased opinion on the state of operation of the plant. We feel that the consultant services concerning the study of the treatment plant could be financed from the proceeds of Loan 1072-CO. We also support a plant operator training program. We advise you to contact INSUGFAL regarding these matters.
Please keep us informed of all new developments concerning the proposed project. Do not hesitate to contact us should you have any questions.

Hoping for a successful cooperation in our joint efforts to improve water and sewerage services for the people of Barranquilla, we remain

Sincerely yours,

Alfonso Zavala,
Chief
Water Supply and Sewerage Division
Latin America and the Caribbean Regional Office

To be cleared with and cc: Mr. Lecuona (LCDD)

cc: Instituto Nacional de Fomento Municipal (IINEFOVAL)
Bogotá, Colombia
ANNEX 3
Page 1

COLOMBIA

BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

Water Supply Emergency Construction Program

1. As described in the previous mission's back-to-office report, construction of new residential areas in the northern part of Barranquilla has been severely stifled by EPMB's inability to provide sufficient water. To overcome these water shortages and to allow continued construction in this area, the main reasons for EPMB's and the Promotora's desire to push the immediate construction of the "Las Flores" water supply scheme. Since the previous mission discouraged EPMB and the Promotora to go ahead with the "Las Flores" project prior to the completion of a feasibility study, EPMB has been seeking other alternatives to bring water services to the northern part of Barranquilla. Currently, EPMB is considering the option of utilizing the existing Puerto Colombio water treatment plant for this purpose. This treatment plant is located very close to the "Las Flores" plant site. At present, the plant produces 80 l/sec of water for the community of Puerto Colombio. Its capacity could be increased to about 250 l/sec by the addition of in-plant pumping capacity. Consequently, this plant could produce 170 l/sec of water which would be sufficient to satisfy the demand created by new housing projects in the northern part of Barranquilla for the next three or four years. The Puerto Colombio plant is operated by the Empresas de Obras Sanitarias del Atlantico (EMPOTLAN). In initial discussions, EMPOTLAN has obtained EMPOTLAN's approval for this plan. The Puerto Colombio project would cost about US$1 million and could be executed within six months. The Promotora at this time appears to be willing to support this emergency project and provide most of the financing for the project. EPMB intends to provide the rest of the funds required.

2. Originally, Barranquilla's existing water treatment plant was designed for a maximum capacity of 1.8 m3/sec. In spite of some recent plant optimization work financed under Loan 1072-CD, the plant's estimated output is no more than 1.4 m3/sec. As an obvious measure to a short-term improvement of Barranquilla's water supply situation, the previous mission suggested to EPMB to do everything possible to boost the existing plant's capacity to its design level. In response to the mission's suggestion, EPMB has retained the U.S. consulting firm of Buck, Seiffert and Jost, the original designers of the plant, to evaluate the plant's performance and to suggest improvement measures. Engineers of Buck, Seiffert, and Jost have made short visits to Barranquilla in November 1979 and February 1980. In their evaluation, the engineers recommended a number of improvement measures to boost the plant's capacity and stressed the need for a plant operator training program. In view of the desperate need for improved water services in Barranquilla, EPMB has decided to follow the consultant's suggestions and intends to contract with the aforementioned firm of Buck, Seiffert and Jost to prepare plans for improving the plant's output. EPMB seeks financing for this consultancy from Loan 1072-CD.
3. The mission is of the opinion that EPM's efforts to boost the capacity of the existing treatment plant is essential to short-term improvements in Barranquilla's water supply services and supports EPM's proposal to re-evaluate the operation and optimization of the existing treatment plant. The mission feels, however, that in order to avoid any conflict of interest, the plant evaluation should be performed by a qualified and independent consultant who has not been involved with the original design and subsequent optimization of the Barranquilla treatment plant.
Execution of the Project

1. The first Bank operation in the water supply and sewerage sector in Barranquilla was Loan 1072-CO under which US$10.06 million were made available to assist in the financing of a water supply and sewerage improvement and expansion program in Barranquilla. The loan is being channelled through Instituto Nacional de Fomento Municipal (INSFOPAL). Satisfactory execution of the works under Loan 1072-CO must be a condition for the proposed Loan to EPMB.

2. The performance of EPMB and INSFOPAL under Loan 1072-CO in the implementation of the Barranquilla program has been plagued by excessive delays and cost overruns caused by inadequate project preparation, frequent changes in EPMB’s management and the Colombian government’s failure to provide the pledged counterpart funds in a timely fashion. Project components were changed in 1976 with the concurrence of the Bank’s resident water supply specialist in response to a request from the Colombian government. The sewerage component of the project was drastically reduced in favor of an expansion of the production capacity of the existing water treatment plant to cover unsatisfied water demands in Barranquilla. The project description, as appraised and as currently being executed, are present in Annex 4 of the Bank’s most recent supervision report for Loan 1072-CO published on January 24, 1980.

3. While in Barranquilla, I discussed with EPMB’s consulting engineers the progress being made in the execution of the project. Attachment 1 presents a list of the components of the revised project with newly projected completion dates. According to this estimate, all works of the package will be essentially completed by the end of 1980 with the exception of some work remaining on the sewerage pumping station; at this time the package is about 75% complete. No further delays in project completion are expected. Currently, EPMB and the government are making efforts to finish the construction of some of the key transmission mains which will bring about significant improvements in water supply in Barranquilla.

4. Attachment 2, taken from the above-mentioned supervision report of January 24, 1980, compares the size of the investment for the project at appraisal and the project package currently being implemented. In order to allow a valid comparison of the investments, all costs have been converted to the October 1973 price level. The total constant project cost
(including technical, but excluding financial contingencies) for the revised project package is Col$239.8 million, 21% less than the costs estimated at appraisal for the original project. The water supply component of the revised project is 20.1% higher than anticipated at appraisal, while the cost of the revised sewerage component is only 22% of the sewerage works foreseen at appraisal.

5. The investment represented by the revised project package under implementation is Col$888.0 million (at the October 1973 price level) less than the project investment target set at appraisal. The Bank has requested INSFOPAL (letter dated February 14, 1980) to provide the Bank by March 31, 1980 with documentation justifying the changes in the project description, indicating the ways to fully achieve project objective and to submit a request for amending the loan documents. INSFOPAL responded to the Bank's request by letter dated March 14, 1980. The documentation provided by INSFOPAL is currently being processed. Since reasonable progress in the implementation of the Barranquilla subproject financed under Loan 1072-CO is a condition for considering a Bank loan to EPMB, it is imperative that the onlending documents are amended as soon as possible to reflect the changes in project description.

Compliance With Loan Conditions

6. The most recent back-to-office report of a supervision mission of Loan 1072-CO (published on January 24, 1980) lists a number of issues concerning EPMB's noncompliance with some of the subloan agreement covenants. These issues mainly refer to matters regarding EPMB's managerial and financial performance, such as inadequate accounting and financial procedures, insufficient insurance coverage of fixed assets and noncompliance with some financial indicators (most notably the operating ratio). While in Barranquilla, I pointed out to EPMB that compliance with all loan covenants must be demonstrated to the Bank, before any new Bank loan to EPMB can be considered.

7. EPMB explained that it had made significant progress regarding some of the issues raised in the supervision report of January 24, 1980. EPMB is in the process of improving its accounting and financial procedures based on manuals prepared recently by financial and management consultants. Currently, EPMB is also computerizing its financial operation. A consultant is preparing new or revising existing computer programs covering invoicing, payroll, inventory, accounts receivables, etc. Regarding the insurance coverage of fixed assets, EPMB is studying possible adjustments in its present coverage with experts from its insurance company. In spite of EPMB's current efforts to upgrade its management, organization, and financial procedures, I feel that many improvements will still be necessary to transform EPMB into an efficient and successful institution. A comprehensive evaluation of EPMB's organizational, managerial, and administrative status by a specialist will be required at appraisal.
8. EPMF's Financial Manager acknowledged that EPMF is probably not complying with some of the financial covenants specified in the loan documents. He expressed confidence, however, that all covenants will be met in 1980 in view of the substantial improvements in EPMF's financial situation expected for 1980 (parras. 9-13).

Projected Financial Performance of EPMF's Services for 1980

9. As described in the previous mission's report, EPMF is responsible for a number of public services, the most important of which are: water supply and sewerage, garbage collection and disposal, street paving, and the maintenance and operation of public markets. In the past all services other than water supply and sewerage have been highly deficitary and revenues coming from the water supply and sewerage sector have been used to subsidize other services. For 1980, EPMF's financial manager predicts considerable improvements regarding the financial performance of all EPMF's services. Even though these predictions appear to be somewhat over-optimistic, there is reason to believe that EPMF's 1980 performance will be significantly better than in 1979.

Water Supply and Sewerage

10. Present tariffs for water and sewerage services were established in 1976. They have been implemented stepwise until maximum tariffs were charged in 1978. Since then water and sewerage tariffs have remained unchanged. A new tariff (Annex 5, Attachment 1 of back-to-office report dated January 11, 1980) has been submitted to the Junta Nacional de Tarifas whose approval of the new tariffs is expected by the end of March 1980. The new tariffs would increase water and sewerage revenues for 1980 by 81% over 1979 revenue levels. The installation of 25,000 more water meters in 1980 will provide EPMF with an additional source of revenue, as EPMF on the average can charge from metered connections for 40 m3/month more than from nonmetered connections. By installing 25,000 additional water meters, EPMF expects, therefore, additional revenues of Col250 million in 1980.

Garbage Collection and Disposal

11. Garbage collection and disposal has been traditionally EPMF's most deficitary service with a deficit of about Col1200 million in 1979. Current tariffs, frozen by Barranquilla's Municipal Council, are extremely low. Any attempts by EPMF to raise tariffs in the past have been vetoed by the Municipal Council. In November 1979, a Departamental Court ruled that the Municipal Council has no right to block tariff increases requested by EPMF. In January 1980 the Municipal Council appealed the Departamental Court's ruling and a final decision on this matter now has to be made by a superior court in Bogotá. The decision of this court is expected for the end of March 1980. A court decision in favor of EPMF would pave the way for significant tariff increases in the garbage collection and disposal sector. EPMF's new tariffs would be implemented gradually and by the end of 1981 would be eight times...
as high as present tariffs. If EPMB is successful in its request for new tariffs, 1980 deficits for garbage collection and disposal services would be reduced to Col$50 million (Col$150 million less than the 1979 deficit).

Street Paving

12. The main source for financing of street paving is a tax based on property value. Recently, the catastral value of properties in Barranquilla has been revalued, thus making available more funds for street paving. EPMB expects that deficits from street paving operations in 1980 will be Col$10 million (Col$30 million less than in 1979).

Public Markets

13. The operation and maintenance of public markets generated in 1979 a deficit of Col$18 million for EPMB. Currently, EPMB is negotiating to sell at Col$80 million its interest in the markets, thus eliminating any future deficits from this service.
**ANNEX 6**

*COLOMBIA*

**BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT**

*Components of Revised Project and Anticipated Date of Completion*

<table>
<thead>
<tr>
<th>Component</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Water Production</td>
<td></td>
</tr>
<tr>
<td>Grit chamber</td>
<td>Completed</td>
</tr>
<tr>
<td>Raw water channel</td>
<td>Completed</td>
</tr>
<tr>
<td>Suction well</td>
<td></td>
</tr>
<tr>
<td>Expansion raw water</td>
<td></td>
</tr>
<tr>
<td>Pumping capacity</td>
<td>2/81</td>
</tr>
<tr>
<td>Electric plant</td>
<td>6/80</td>
</tr>
<tr>
<td>Flash mix</td>
<td>5/80</td>
</tr>
<tr>
<td>Increase filtering capacity plant #1</td>
<td>5/60</td>
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<tr>
<td>Rehabilitation existing clarifiers</td>
<td>Completed</td>
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<tr>
<td>Optimization of filter plant #2</td>
<td>11/80</td>
</tr>
<tr>
<td>Optimization sedimentation and filter plant #3</td>
<td>10/80</td>
</tr>
<tr>
<td>Construction of chemical storage building</td>
<td>5/80</td>
</tr>
<tr>
<td>Interconnection of plants</td>
<td>Completed</td>
</tr>
<tr>
<td>Water Pumping</td>
<td></td>
</tr>
<tr>
<td>Suction well</td>
<td>Completed</td>
</tr>
<tr>
<td>Interconnection of plants</td>
<td>Completed</td>
</tr>
<tr>
<td>Installation of two pumps</td>
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</tr>
<tr>
<td>Installation of electric motor</td>
<td>9/80</td>
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<tr>
<td>Electric plant</td>
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<td>Building high pressure pumping</td>
<td>7/80</td>
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<tr>
<td>Valves</td>
<td></td>
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<tr>
<td>Optimization El Recreo pumping station</td>
<td>6/80</td>
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<tr>
<td>Optimization Las Delicias pumping station</td>
<td>Completed</td>
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<tr>
<td>Water Storage</td>
<td></td>
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<tr>
<td>Construction of El Carrizal storage tank</td>
<td>Completed</td>
</tr>
<tr>
<td>Water Distribution</td>
<td></td>
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<tr>
<td>83 km of mains and distribution pipe</td>
<td>12/80</td>
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<tr>
<td>Water Metering</td>
<td></td>
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<tr>
<td>Purchase of accessories for water meters</td>
<td>Completed</td>
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<tr>
<td>Sewerage</td>
<td></td>
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<tr>
<td>Upgrading pumping stations #1 and #2</td>
<td>3/81</td>
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<tr>
<td>Overfall sewer</td>
<td>3/81</td>
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### Major Work Category

<table>
<thead>
<tr>
<th>Major Work Category</th>
<th>Appraisal Estimate</th>
<th>Revised Project</th>
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<tbody>
<tr>
<td>Water production</td>
<td>7.3</td>
<td>28.3</td>
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<td>Water pumping</td>
<td>3.7</td>
<td>18.8</td>
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<td>Water storage</td>
<td>3.4</td>
<td>10.6</td>
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<tr>
<td>Water distribution</td>
<td>120.9</td>
<td>108.1</td>
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<td>Water metering</td>
<td>10.1</td>
<td>9.6</td>
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<tr>
<td>Total-water supply</td>
<td>165.4</td>
<td>155.3</td>
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<td>Total-sewerage</td>
<td>112.4</td>
<td>25.0</td>
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<tr>
<td>Engineering and Administration</td>
<td>25.8</td>
<td>23.0</td>
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<tr>
<td>Total-Base Cost</td>
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<td>227.3</td>
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<tr>
<td>Technical Contingencies</td>
<td>38.7</td>
<td>10.5</td>
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<tr>
<td>Total-Constant Cost</td>
<td>322.3</td>
<td>233.8</td>
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PROXIMO LUNES CATORCE VIAJAREMOS NEW YORK Y VISITAREMOS
WASHINGTON PARA LO CUAL LE SOLICITAMOS CITA EN UNION INGENIEROS
EMILIO RODRIGUEZ COMA WALTER STOTTMAN PARA DIA MIERCOLES
DIECISEIS ABRIL PUNTO NOS COMPLACIEN COMUNICABLE QUE HEMOS
DADO AL SERVICIO PRIMERA ETAPA AMPLIACION REFEES CON

COL 1818

COL576-BAW029-INGENIERO-PAGE-2-51

FORMABLE EXITO Y CUBRIENDO CON FONDOS PROPIOS MUCHOS DE LOS
CAMBIOS EN DISEÑOS QUE NO HUBIERAN DADO LOS RESULTADOS HAY
LOGRADOS PUNTO ESPERANOS DE ESA ENTIDAD MAYOR CONFIABILIDAD
EN LA ORIENTACION QUE LE HEMOS DADO AL MANEJO DE NUESTRA EMPRESA
PUNTO CORDIALMENTE COMO

JAIME DEVIS PEREIRA
GENERAL GERENTE EMPRESAS PUBLICAS MUNICIPALES

COL MIL
Barranquilla, Abril 10. de 1980
No. GER - 001804

Ingeniero
WALTER STOTTMAN
The World Bank
1818 H Street N.W.
Washington D.C. 20433
Estados Unidos

Apreciado doctor y amigo:

Para lo de su conocimiento le estoy haciendo llegar fotocopia de la carta del Export-Import Bank en la que acusan recibo del total del saldo de la deuda que otras similares -tracciones de estas Empresas no habían cancelado.

Muy cordialmente,

EMPRESES PUBLICAS MUNICIPALES
DE BARRANQUILLA

JAIME VENEZUELA
GERENTE GENERAL

Incluyo anulado
JDP/eva.
March 13, 1960

Empresas Publicas Municipales de Barranquilla
Apartado Aéreo. 321
Barranquilla, Colombia

Ref: Eximbank Credit No., 2205 - COLOMBIA

Dear Sirs:

Payment of $176,605.00 was received March 4, 1960. Funds were applied in the following manner:

Principal due 6-1-70 $ 30,113.06
Principal due 10-30-70 42,013.00
Principal due 6-30-71 42,013.00
Principal due 10-30-71 38,493.05
Interest due 10-30-79 14,993.25

Additional Interest on Principal totaling $158,628.07 X 120 days @ 6%
(10-30-79 to 3-3-80) 3,283.39

Additional Interest on Interest received
3-6-80 $14,393.25 X 120 days @ 6%
(10-30-79 to 3-3-80) 258.12

Total Application: $176,605.00

Balance unpaid and past due is principal due 10-30-79, $3,583.97 plus additional interest from 10-30-79 to date paid @ 6%. Prompt remittance of $3,583.97 plus interest is requested.

Yours truly,

[Signature]

cc: Ministerio De Hacienda Y Credito Publico
Palacio De Los Ministerios
Bogota, Colombia
Attn: Leonor Mantoya De Torres
Director General De Credito Publicas

cc: Minister of Finance
Palacio De Los Ministerios
Plaza San Agustin
Bogota, Colombia
Attn: Sr. Jaime Garcia Parra

cc: Banco De La Republica
Bogota, Colombia
Attn: Sr. Rafael Umana, General Manager
Barranquilla, Abril 10. de 1980
No. GER - 001801

Ingeniero
Emilio Rodríguez
The World Bank
1818 H Street N.W.
Washington D.C. 20433
Estados Unidos

Apreciado doctor y amigo:

Para lo de su conocimiento le estoy haciendo llegar fotocopia de la carta del Export-Import Bank en la que acusan recibo del total del saldo de la deuda que otras administraciones de estas Empresas no habían cancelado.

Muy cordialmente,

EMPRESES PUBLICAS MUNICIPALES
DE BARRANQUILLA

JAIME PÉREZ PEREIRA
GERENTE GENERAL

Incluido anuncio
JDP/eva.
March 13, 1980

Re: EximBank Credit No. 2205 - COLOMBIA

Dear Sirs:

Payment of $176,405.00 was received March 4, 1980.

Funds were applied in the following manner:

Principal due 5-1-79 $36,113.04
Principal due 10-30-79 42,033.00
Principal due 4-30-79 42,033.00
Principal due 10-30-79 38,649.03
Interest due 10-30-79 14,393.22

Additional interest on Principal totaling $158,628.07 X 126 days @ 6%
(10-30-79 to 3-3-80) 3,285.56

Additional Interest on Interest received:
3-3-80 $14,393.25 X 126 days @ 6%
(10-30-79 to 3-3-80) 299.13

Total Application. $176,405.00

Balance unpaid and past due is principal due 10-30-79,
$3,583.97 plus additional interest from 10-30-79 to date paid.
@ 6%. Prompt remittance of $3,583.97 plus interest is requested.

Yours truly,

[Signature]

Airali O. Westley
Manager, Budget &
Cash Control Dept.

cc: Ministerio De Hacienda Y Credito Publico
Palacio De Los Ministerios
Plaza San Agustin
Bogota, Colombia

cc: Minister of Finance
Palacio De Los Ministerios
Plaza San Agustin
Bogota, Colombia

Attn: Ministerio De Hacienda Y Credito Publico
Attn: Minister of Finance
Bogota, Colombia

Attn: Sr. Rafael Gana, General Manager
Attn: Sr. Jaime Garcia Parra
Febrero 26 de 1.990
GER No.

Señores
BANCO MUNDIAL
Att. Ingeniero Walter Stottmann
Washington D. C.

Apreciado señor Stottmann:

Tengo a bien ratificarle que a principios de este mes, después de conversaciones en Bogotá con la misión del Banco Interamericano de Desarrollo, resolvimos que debemos seguir adelante en nuestra solicitud de un nuevo préstamo, para la construcción de una nueva planta de tratamiento o acueducto al norte de nuestra ciudad. A los mencionados enviados de la institución bancaria, te hicimos saber que habíamos decidido continuar con la solicitud del Banco Mundial ya que, aunque las condiciones económicas son iguales, con ustedes obtendríamos menos tiempo en la conclusión de estudios y aprobación de créditos, debido a que ustedes ya conocen nuestra estructura actual y sobre todo nuestra urgencia sanitaria.

En consecuencia, hacemos a Ustedes la solicitud formal para obtener la financiación para la construcción de la nueva planta de tratamiento "Las Flores", como también del sistema de alcantarillado necesario.

El Gobierno seccional ha dado su autorización a esta solicitud.

De Ustedes muy cordialmente,

JAIME DEVIS PERETRA
Gerente General

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<tr>
<th>JDP/gsa.</th>
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<tr>
<td>ACUEDUCTO</td>
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<td>IMPUESTO FISCAL</td>
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</tbody>
</table>
OFFICE MEMORANDUM

TO: Mr. Walter Stottmann, EGR, LCPUS

FROM: Alfonso Zavala, Chief, LCPUS

DATE: February 22, 1980

SUBJECT: COLOMBIA—Proposed Barranquilla Water Supply and Sewerage Project—Preparation Mission

TERMS OF REFERENCE

1. You should travel to Barranquilla on February 25 and stay for one week to discuss with officials of the Empresas Publicas Municipales de Barranquilla (EPM) the proposed Barranquilla Water Supply and Sewerage Project on the basis of the Bank’s letter of February 1, 1980. You should review any progress made by EPM in the preparation of the project and discuss steps necessary to advance the preparation of the project. In particular, you should perform the following tasks:

   (a) identify preliminary project components;
   (b) discuss project preparation schedule and ascertain whether or not the project can be appraised during the fall of 1980;
   (c) discuss financing of project preparation; and
   (d) discuss the Las Flores water treatment and transmission scheme and possible alternatives to the development of new water supply schemes.

2. Time permitting, you should review and assess progress in the execution of physical works financed in Barranquilla under Loan 1072-CO in connection with the proposed project.

3. While in Barranquilla, you should contact the Bank Resident Representative in Bogotá, inform him of the purpose of the mission, and keep him informed of the progress of your work and findings.

4. Upon your return to headquarters, you should prepare a back-to-office report describing your findings and recommendations.

Cleared with and cc: Mr. Lucena (LCIDB)

cc: Wessels (LCPUS), Fasulla (LCIDB), Costa (LCPUS), Rajagopalan (PAS) (3), Willoughby (TMT) (3), Chittleburgh (IDC), Collier (LID), Grothe (CTR), Gutierrez (LACIC), DeVan (LCPUS), LACIC

WStottmann:ja
Dr. Jaime Devis Pereira  
General Manager  
Empresas Públicas Municipales de Barranquilla (EPMB)  
Calle 32, No. 44 - 46  
Barranquilla, Colombia  

RE: Barranquilla Water Supply and Sewage Project

Dear Dr. Pereira:

First, we would like to thank you very much for the hospitality extended to Messrs. Stottmann and Nakovic during their recent mission to Barranquilla. It is the mission’s assessment that due to higher than expected population growth both sewerage and water supply services in Barranquilla continue to be deficient although efforts are being made by EPMB to improve services through a project financed under our Loan 1072-C0 to INSTROPAL. Substantial investments will be necessary in the near future to boost Barranquilla’s water and sewerage service levels. We are pleased to learn that EPMB, local government authorities and the private sector, as represented by the Promotora, have joined forces and are determined to bring adequate water and sewer services to the people of Barranquilla as soon as possible. Realizing Barranquilla’s desperate need for improved services and recognizing your firm commitment towards this goal, we would like to assure you of the Bank’s willingness to assist you in your endeavor.

As the mission told you already, the World Bank requires the preparation of a technically, financially, and economically sound investment program.
(feasibility study) before a project can be appraised and a loan granted. At
the present time such a study does not exist, but we are pleased to learn that
you have already taken the necessary steps to contract for a feasibility study
with the objective to plan the future expansion of Barranquilla's sewerage
and water supply system.

We repeat our uneasiness about the realization of the Las Flores Project
before the results of the feasibility study become available. We feel that it
would not be wise to commit substantial funds to a project whose
technical and economical justifications are not established by adequate prepara-
tory work and detailed evaluation of other promising alternatives. Its
execution prior to the results of the feasibility study could jeopardize
Bank financing of the proposed project. In particular, we believe that the
questions concerning the future water quality of the Magdalena River downstream
of Barranquilla have not received adequate attention in the selection of the
Las Flores scheme.

Instead, we would like to recommend to you an alternative proposal which
has been presented to you already by our mission. The first and most important
step under this plan would be to initiate and complete the feasibility study
for water and sewerage as soon as possible. One of the most important objectives
of the feasibility study would be the development of a series of emergency
measures designed to alleviate at least some of the most urgent water shortages
while a medium-term water supply system expansion is prepared and implemented.
We believe that further optimization work at the existing water treatment plant
and expansions in your water transmission and storage network, coupled with a
determined effort to conserve water, could lead to substantial water service
improvements at a probable cost noticeably below the estimate for the Las Flores
Project. Financing of these improvements would come from EPMB, INSFOPAL and hopefully also from the Promotora. We feel that it would be possible to commence work on the emergency measures in early 1981, if work on the feasibility study could begin before the middle of 1980.

The feasibility study would also identify a medium-term sewerage and water supply investment program which would include the works necessary to fulfill Barranquilla's water and sewerage needs up to the year 1990. The Bank is prepared to consider the financing of this project, perhaps lending directly to EPMB if preparatory work for this loan is carried out in a manner satisfactory to the Bank under the terms of reference recently discussed with our mission.

The key to a speedy implementation of our proposal is, of course, to initiate and complete the feasibility study and designs not later than March 31, 1981. The Bank is prepared to assist EPMB and their consultants in the preparation of the feasibility study to ensure that the results of this study satisfy the Bank's project evaluation requirements. We urge you to continue your efforts towards assuring the financing of this study from Fondo Nacional de Proyectos de Desarrollo and towards the establishment of a short list of competent national or international consulting firms.

While preparing for the new project, we suggest strongly that you devote your energy and resources towards improving the efficiency of the existing system through a timely completion of the INSFOPAL II Project. We urge you to make every possible effort to cut down on your unaccounted-for water by continuing with your meter installation program, as increased metering of your connections would not only increase your revenues but also could reduce waste of water.
Since the mission's departure you probably have continued your discussions on how to solve Barranquilla's urgent water supply and sewerage needs in the most speedy and efficient manner. Please let us know your current thinking on this matter.

We intend to send another mission to Barranquilla during the last week of February 1980 to review the execution of works financed under Loan 1072-CO, to further discuss the Bank's potential involvement in a future Barranquilla water supply and sewerage project, and if you wish, to advise you in the preparation of the feasibility study. By that time, we hope that we could define a course of action towards a fruitful cooperation between the Bank and EPMB with the common objective of bringing adequate water and sewerage services to Barranquilla as soon as possible.

Wishing you a very successful New Year, we remain.

Cordially,

Alfonso Zavala
Chief
Water Supply and Sewerage Division
Latin America and the Caribbean Regional Office

Attachment

Cleared with and cc: Mr. Lecuena (LG208)

cc: Costa, Todd (LCFMS), Collell (LEG), Grothe (CTR), Gutierrez (LAFCL)
EMPRESAS PÚBLICAS MUNICIPALES DE BARRANQUILLA
BARRANQUILLA, COLOMBIA

SR. JAIME DEVIS PEREIRA, GERENTE GENERAL. AFTER REVIEW FIND
TERMS OF REFERENCE FOR PROPOSED FEASIBILITY STUDY ADEQUATE. FOR
REQUEST FOR PROPOSAL ADD BRIEF DESCRIPTION OF EXISTING SITUATION
AND PROBLEMS AND GENERAL OBJECTIVES (EMERGENCY MEDIUM- AND
LONG-TERM PROGRAM). ENCOURAGE YOU TO CONTRACT FOR STUDY AS
SOON AS POSSIBLE. LETTER FOLLOWS SOON. REGARDS STOTTHANN
INTDAFRAID

NOT TO BE TRANSMITTED

Barranquilla Water Supply

UStotthannnje

Alfonso Javier, LC, LCFMS
LAC Projects

cc: Todd (LEPUD), Gutierrez (LAFCL), Lecuona (LCMD)
ANNEX 2

COLOMBIA

BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT

Background and Population

1. Barranquilla is located on the left bank of the Magdalena River about 20 km upstream of the River’s confluence with the Atlantic Ocean. The city is the capital of the Departamento Atlantico and is the major commercial and industrial center of Colombia’s Atlantic Coast region. At present, Barranquilla covers an area of about 7,000 ha, spreading out over slightly hilly terrain with a maximum elevation of 140m above sea level. The climate of Barranquilla is tropical with little variations in temperature. The long-term annual average temperature is reported as 29°C.

2. Barranquilla, like many other cities in South America, has in past decades experienced a substantial population growth mainly due to immigration of people from rural areas. Based on censuses taken in 1951, 1964, 1968 and 1973 annual population growth rates as high as 4.7% have been estimated. At the time of the last census in 1973, the population of Barranquilla was estimated to be 661,000. Many observers have expressed doubts about the validity of this figure and maintain that the population was higher than officially published.

3. Based on the 1973 census, various projections for current population figures have been made. Estimates range from 960,000 to 1,130,000. It appears to be the consensus among local authorities that the current population of Barranquilla is "somewhere around" 1,000,000 and the population is growing at an annual average rate of 3.2%. This rate is projected to decrease gradually in the future and stabilize at 2.2% by 1980. Based on a current population of 1,000,000 and assuming that the above growth pattern will be followed, Barranquilla is projected to have 1.2 million inhabitants by 1985, 1.4 million by 1990, and 1.63 million by 2000.

4. Much of this growth will continue to come from rural areas. If the present pattern of city expansion continues, and such a continuation is very likely, most of the development of low-cost housing will take place in the southern and southwestern parts of the city. The northern and northwestern parts of the city will continue to see urban developments sprout up for people in the medium to high-income brackets.

5. Water supply and sewerage services in Barranquilla are provided by the Empresas Publicas Municipales de Barranquilla (EPMB). This utility provides several other public services, such as street cleaning, garbage collection, street paving, slaughterhouse, maintenance of public parks, and a zoological park.


COLOMBIA

BARRANQUILLA WATER SUPPLY AND SEWAGE PROJECT

Water Supply Services and Demands in Project Area

Existing Water Supply System

1. The Magdalena River, with a minimum flow of 1,700 m³/sec, provides an abundant source of easily treatable and non-contaminated water for the city of Barranquilla. A conventional water treatment plant with a current maximum capacity of 3.8 m³/sec provides high-quality water. The plan is located on the banks of the Magdalena River uppermost of the city.

2. The city of Barranquilla is served by a distribution system consisting of approximately 750 km of pipe with diameters varying from 3" to 42". Eleven tanks with a combined capacity of 70,200 m³ provide storage and compensation. Due to Barranquilla’s topography, the distribution system is divided into four separate pressure zones: El Recreo, Zona Delicias Baja, Zona Delicias Alto, and La Mina.

Service Levels

3. The mission produced service level estimates on the basis of monthly water billing data furnished by EPMB for the first ten months of 1979. In October 1979 67% of customers were billed 78,500 connections; 93% of these were residential connections while the remaining connections served mainly industrial and commercial enterprises. Of the 78,500 connections, 14,600 were equipped with metering devices. Water volumes billed for metered connections are almost twice as high as volumes billed for unmetered connections. EPMB estimates that about 20,000 illegal connections exist in Barranquilla.

4. Comparisons of water production and water billing figures show that at present 43% of the water produced is unaccounted-for. This percentage is reduced to 17% if adjustments in consumption figures are made to account for illegal connections and underbillings of non-metered connections.

5. Assuming that the current population of Barranquilla is 1,000,000 and 67% persons are reached by each connection, 49% of Barranquilla’s population has access to a piped water supply. If illegal connections are taken into account, the service coverage rises to 63%. The low-income segment of the population is affected most by the lack of access to public water supplies. People without access to water are forced to buy water from private vendors at C$21.50/gal. As a result, many of the urban poor have to spend a disproportionate share of their scarce income for their basic water needs.

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1/ The analysis of this data gives results different from those reported by UISPNGAE and appearing in Loen 1072–CP supervision reports. The next supervision mission should investigate the reason for these discrepancies.
6. Average per capita water consumption in Barranquilla is about 310 l/day. Water consumption rates twice as high have been reported for some affluent sections of the city. The average daily water consumption for industrial and commercial connections is about 10.5 m3 per connection.

7. Due to insufficient transmission and storage capacities in the distribution system, service to existing connections is quite erratic and water rationing is practiced throughout the city. Only 35% of all connections have continuous 24-hour service, and 30% of the connections have water available for at least 12 hours per day. About 20% of the connections have water for less than six hours per day, while 15% of the connections receive service for one hour per day. Again, the urban poor are mostly affected by water rationing, since it is in the poor sections of the city where water is rationed more severely. People in higher income brackets compensate for water rationing by installing private roof-top storage tanks.

8. The insufficient capacity of the distribution system has severely limited construction of new houses in Barranquilla. At the present time, the development of several hundred hectares of land for housing for all income groups is stifled due to lack of water. Both private land developers and public housing agencies, such as the Instituto de Credito Territorial (ICT) are affected. The ICT, for instance, has already erected 12,000 apartment units for medium-income groups in the Ciudadela 20 development, but these houses cannot be sold and occupied because no water is available. EPMH's inability to bring adequate water supplies to these planned housing developments is beginning to seriously affect construction and related industries in Barranquilla.

Metering of Connections

9. In 1976 30,000 meters were installed in Barranquilla. However, most of these meters were malfunctioning and in 1977 all meter reading was discontinued. EPMH recognizes water metering as an important means to reduce water consumption and the volume of unaccounted-for water, and in 1979 embarked on a massive campaign to reinstall meters. By September 1979 about 14,600 meters have been newly installed. The target is to install 70,000 meters by the end of 1981 and have all connections metered by 1985. In very low-income areas where metering of individual house connections is not practical, metering of neighborhoods and bill collection through the local junta directiva is considered.

Improvements Under Loan 1072-00

10. EPMH has been the recipient of a US$10.06 million Bank loan for a sewerage and water supply system expansion and improvement program. Implementation of this program began in 1975 and is expected to be completed by the end of 1980. By that time, the water treatment plant capacity will have increased to 4.4 m³/sec, sufficient to meet the city's demand. The impact of the improvements in the distribution network and in storage capacity is hard to quantify. EPMH expects that water rationing throughout the city will be reduced considerably. These improvements, however, will
not alleviate the critical water shortages in areas located near the periphery of the city.

Future Demand

11. No reliable water demand projections were available from EPMB. Therefore, the mission prepared a water demand forecast for the next decade. Due to lack of more substantiated data, the mission based its projections on the following assumptions:

(a) population growth as defined in Annex 2;
(b) service levels for residential connections will increase from 63% at present to 90% in 1990. Note that service levels adjusted for illegal connections are used;
(c) per capita water consumption rates will decrease to 290 l/day by 1990;
(d) the number of industrial/commercial connections increase by 3% per year;
(e) the water consumption per industrial/commercial connection remains constant at 10,480 l/day;
(f) physical water losses reduce from 17% to 12% in 1990; and
(g) the maximum day demand is 15% higher than the average day demand.

12. According to the projections presented in Attachment 1, the rate of treated water production must be increased by 76% over the next decade. After completion of the treatment plant expansion and optimization program financed under Loan 1072-CO, the capacity of the plant will rise to 4.4 m³/sec, enough to meet the forecasted demand until sometime in 1981. There is some speculation that through further optimization measures the capacity of the existing plant could be brought up to 4.8m³/sec. This capacity would be sufficient to meet Barranquilla's demand until 1983. Thereafter, a major expansion of treatment capacity either at the existing or at a new site will become necessary.

13. The above comparison of treatment capacity available and projected water demand illustrates very clearly Barranquilla's desperate need for more water treatment capacity. Likewise, the distribution system capacity, even after completion of the improvements financed under Loan 1072-CO, will be highly insufficient. In summary, it is imperative that EPMB undertake a major construction program to boost both treatment and distribution capacity as soon as possible.
<table>
<thead>
<tr>
<th>Regulation</th>
<th>Domesticated</th>
<th>Invasive/Nonindigenous</th>
<th>Total</th>
<th>Domestic</th>
<th>Invasive</th>
<th>Nonindigenous</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>1.5</td>
<td>1.0</td>
<td>2.5</td>
<td>1.5</td>
<td>1.0</td>
<td>2.5</td>
<td>5.0</td>
</tr>
<tr>
<td>Size</td>
<td>2.0</td>
<td>1.5</td>
<td>3.5</td>
<td>2.0</td>
<td>1.5</td>
<td>3.5</td>
<td>7.0</td>
</tr>
<tr>
<td>Color</td>
<td>3.0</td>
<td>2.5</td>
<td>5.5</td>
<td>3.0</td>
<td>2.5</td>
<td>5.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Weight</td>
<td>4.0</td>
<td>3.5</td>
<td>7.5</td>
<td>4.0</td>
<td>3.5</td>
<td>7.5</td>
<td>15.0</td>
</tr>
</tbody>
</table>

*Note: The table above contains data related to different categories with values ranging from 1.0 to 5.0.*
1. EPMH maintains a sanitary sewerage system whose 680 km of pipe serve the central district and the more affluent sections of Barranquilla. At present, EPMH counts about 65,000 connections of which 60,000 serve individual residences and 5,000 evacuate sewage from commercial/industrial enterprises and public institutions. Assuming the population of Barranquilla is 1,000,000 and an average of 6.7 persons are served by one connection, the sewerage service coverage can be estimated at 40%.

2. Barranquilla has no piped stormwater system; stormwater is evacuated towards the Magdalena River via city streets and several open canals. During and after torrential rainfalls, traffic in the city is paralyzed as many of the main streets in the city become stormwater drainage channels.

3. Barranquilla is divided into 11 sewer districts. The existing or planned collection systems in each sewer district operate independently of each other. Sewage from ten of the districts is transported in a generally eastward direction towards the Magdalena River. In most districts the topography requires pumping the sewage into the Magdalena River; sewer district 11 occupies the eastern part of the city. EPMH plans to collect the sewage from this district in an interceptor running in a south-north direction parallel to the Av. de Circunvalación. This interceptor eventually would discharge into a stream flowing into the Atlantic Ocean.

4. In 5 of the 11 sewer districts no sewerage system exists. The capacities of the main collector in two districts are highly insufficient and EPMH expects that the carrying capacity in three other districts will become insufficient in the near future. Due to the insufficient capacity of the sewerage system in some areas of the city, several of the open stormwater drainage canals, especially the El Mercado and La Auyan Canals, receive substantial inflows of domestic sewage. This situation has led to extremely unsanitary conditions in some areas.

5. All sewage, domestic and industrial, reaches the Magdalena River untreated and there are no plans for providing treatment for domestic sewage in the near future. Recently, a law was passed requiring industrial polluters to treat their industrial wastes. There are, however, severe doubts about the enforceability of these new regulations for the near future. Fortunately, the flow in the Magdalena River is very large (minimum of 1,700 m³/sec). No major water quality problems in the River itself have been observed under the present waste load.

6. Although no explicit projections were presented to the mission, it is quite obvious that the sanitary sewerage coverage in the city of Barranquilla is insufficient. In the past some major investments planned for the sewerage
sector have been given up in favor of an accelerated expansion of the water supply system. For example, the construction of 70 km of interceptors and 250 km of secondary sewers was planned originally under Loan 1072-GO but only one interceptor of 3 km in length was actually completed. Unsanitary conditions will grow as the water supply system will be expanded. The water supply expansion program must be complemented by adequate improvements and extensions of the city's sewerage system. In this context it will also become necessary to carefully monitor the changes in the Magdalena River's assimilative capacity due to increasing waste loads.
COLOMBIA
BARRANQUILLA WATER SUPPLY AND SEWERAGE PROJECT
The Potential Borrower

1. The borrower would be the Empresas Publicas Municipales de Barranquilla (EMMB), which operates as a fully decentralised autonomous government agency. Per Acuerdo No. 24/60 of the Municipal Council of Barranquilla, EMMB has the responsibility of providing water, sewerage, and other public services.

2. The governing body of the EMMB is its Board of Directors. At the present time, the Board has seven members: the Mayor of Barranquilla, who acts as Chairman, two members nominated by the President of the Republic of Colombia, one member nominated by the Comité Interministerial del Atlántico, and three members nominated by the City Council. The President of the City Council, the City Controller and the General Manager of EMMB have the right of voice and vote at the Board of Director’s meetings. The General Manager is appointed by the Mayor and the Board of Directors. The Mayor of Barranquilla is appointed by the Governor of the State of Atlántico, who in turn is appointed by the President of the Republic of Colombia.

Organization and Management

3. From 1976-78 management consultant, Consultores Generales Asociados, have provided management assistance to EMMB. One of the results of the consultant’s work was a restructuring of EMMB’s organization. At present, EMMB has four departments: Administration, Finances, Operations and Technical Services. The consultants also prepared a number of manuals for the Administrative and Financial Departments. It appears, however, that the guidelines set forth in those manuals are not being implemented. No manuals exist for the Technical Services and Operations Departments.

4. Lack of adequate planning has created poor inter-departmental coordination. Two departments, Administration and Operations, dominate. The Financial and Technical Departments are understaffed. EMMB lacks especially any adequate technical and financial planning capability. The overall impression of the mission is that EMMB’s management performance has been quite ineffective in recent years. A reevaluation of EMMB’s organizational structure and management procedures by a specialist is required. One of the key questions to be investigated appears to be whether or not it would be advantageous to provide more organizational autonomy for each of the different service categories, especially for the water supply and sewerage sector which is by far the largest of EMMB’s services.
Tariffs

11. Present tariffs for water and sewage services in Barranquilla were established in 1976 and have remained unchanged since then. Tariff levels for water supply depend on the type of user and property values (Attachment 1). Customers served by unmetered connections pay for a fixed monthly water volume determined on the basis of customer type and property value. Tariffs for sewer connections amount to 30% of the water bill. Tariffs are considered to be on the low side (US$0.13/m3) and EPMB is presently taking action to increase tariffs for all services after a freeze on all public service tariffs has been lifted by the government. EPMB’s Board has just approved a new tariff (Attachment 1-Proposed Tariffs) which is currently being processed by the Junta Nacional de Tarifas. The new tariffs would increase water and sewer revenues for 1980 by 81% over 1979 revenue levels.

Billing and Collection

12. EPMB sends out bills according to more than 40 different public utility rates and taxes, a situation which makes processing and collecting of bills an extremely inefficient and cumbersome task. Due to severe deficiencies in the billing system and bill collection procedures, the level of bills unpaid is extremely high as illustrated by the figures presented below:

<table>
<thead>
<tr>
<th>Ratio of Accounts Receivable from Clients to Revenues (%)</th>
<th>1976</th>
<th>1977</th>
<th>1978</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated</td>
<td>72</td>
<td>55</td>
<td>55</td>
<td>72</td>
</tr>
<tr>
<td>Water and sewerage</td>
<td>48</td>
<td>31</td>
<td>38</td>
<td>47</td>
</tr>
<tr>
<td>Street cleaning</td>
<td>66</td>
<td>52</td>
<td>59</td>
<td>83</td>
</tr>
<tr>
<td>Street paving</td>
<td>270</td>
<td>196</td>
<td>336</td>
<td>233</td>
</tr>
<tr>
<td>Market places</td>
<td>77</td>
<td>13</td>
<td>63</td>
<td>123</td>
</tr>
<tr>
<td>Other</td>
<td>127</td>
<td>166</td>
<td>81</td>
<td>142</td>
</tr>
</tbody>
</table>

\[* Reserve for uncollectable bills is not included.\]

The internal auditor reports that, as of December 31, 1979, 9.6% of EPMB’s customers have not paid their bills for more than one year and those bills amounted to 66.8% of the accounts receivable. It is obvious that EPMB’s billing and collection procedures need upgrading.

Accounting

13. The Accounting Division is one of the weakest entities in EPMB as far as number and quality of staff is concerned. The following deficiencies were noted by the mission:

(a) delay of about four months in publishing of quarterly financial statements;
 Annex 5
Page 4 of 5

(b) warehouse information is unreliable;
(c) some accounting procedures that could be computerized are still done by hand;
(d) lack of balance checking between the computer center and accounting;
(e) third party contributions are not registered;
(f) work-in-progress accounting is poor and not related to fixed assets in operation;
(g) many assets are not registered; and
(h) the current accounting system is inadequate.

14. At the present time, EPMB is in the process of fully computerizing its accounting procedures. However, the lack of sufficiently qualified personnel will remain the main obstacle for the establishment of a reliable accounting system. Technical assistance in accounting matters and the hiring and training of qualified personnel will be essential for improving the reliability and usefulness of EPMB's accounting system.

Planning and Budgeting

15. Since there exists no medium and long-term financial planning, the only financial plan available to EPMB is its annual budget as required by law. The annual budget is consolidated into the municipal budget which, in turn, becomes part of the national budget. On a cash basis, budget control in EPMB is carried out very strictly since no payments can be made without the approval of the Budget Office. There is no relation between budget control and accounting. Control statements for June 1979 show that expenses and revenues reached only 50% and 64% respectively of the budgeted accounts. In summary, the mission finds that planning and budgeting procedures practiced by the EPMB are quite deficient. To improve short-term financial planning coordination between accounting and budget control is essential. There is also a definite need to coordinate medium and long-term technical and financial planning.

Auditing

16. EPMB's books are audited by three different auditing groups:

(a) fiscal auditors as required by Colombian law; fiscal auditors are nominated by the City Council and their activities are mainly an "a-priori" control of expenses, i.e., verifying budget balances and the legality of payments;
(b) internal auditors reporting directly to the General Manager; internal auditing activities are also on an "a-priori" basis. There is much overlap and lack of coordination between the fiscal and internal auditors. Presently, EPMB is initiating an "a-posteriori" analysis of accounts. The group in charge of this task is well staffed and works according to its own manual; and

(c) External Auditors—an analysis of financial statements is made annually by an independent auditor.

In its present form EPMB's auditing procedures are bothersome and not efficient. A technical assistance program would be highly desirable to assist EPMB in the development of a more efficient auditing system.

Financial Position

17. During the 1975-78 period EPMB experienced a net loss; only during one year (1977) did EPMB's operation yield a net profit. The operating ratio has always been greater than one. Non-cash charges, non-operating expenses and interest charges have been greater than the net income before depreciation. Nevertheless, gross and net internal cash generation have always been positive. The debt service ratio for the period has been 2.08 and internal contribution to investment was 19.14X. Based on revalued fixed assets, EPMB is complying with the rate of return covenant specified in the Loan Agreement. The projected rate of return for 1979 for water and sewerage services is 18.5% compared to the covenanted 3.3%.

18. Short and medium-term loans have been necessary to solve liquidity problems. The following debt/equity ratios have been recorded for the 1975-78 period.

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt/Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>6/94</td>
</tr>
<tr>
<td>1976</td>
<td>11/69</td>
</tr>
<tr>
<td>1977</td>
<td>25/75</td>
</tr>
<tr>
<td>1978</td>
<td>53/57</td>
</tr>
</tbody>
</table>

The deterioration of the debt/equity ratio was due mainly to net losses and growing indebtedness. The June 1979 income statement shows improving results. Even more improvements are projected for 1980 when major tariff increases are expected.

19. EPMB utilized profits generated by some services to subsidize losses of other services. For example, in 1978 water and sewerage services generated profits of Co1841.2 million which in conjunction with taxes of Co1899.3 million and a small profit of Co150.2 million from the slaughterhouse operation, subsidized Co5 of the losses sustained by other services (Co18215.5 million). The mission indicated to EPMB that inter-service subsidization, as currently practiced, would not be acceptable to the Bank. Each of EPMB's services should have their own financial sources. A new financial information and accounting system would have to be adopted in order to obtain clear and reliable financial data separately for each of EPMB's services.
<table>
<thead>
<tr>
<th>User Category</th>
<th>Present Tariffs</th>
<th>Proposed Tariffs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed Charge</td>
<td>Base</td>
</tr>
<tr>
<td></td>
<td>Golf / month</td>
<td>Consumption</td>
</tr>
<tr>
<td>1-10</td>
<td>15.0</td>
<td>20</td>
</tr>
<tr>
<td>10-50</td>
<td>30.0</td>
<td>20</td>
</tr>
<tr>
<td>50-100</td>
<td>54.0</td>
<td>20</td>
</tr>
<tr>
<td>100-200</td>
<td>85.0</td>
<td>20</td>
</tr>
<tr>
<td>200-500</td>
<td>125.0</td>
<td>20</td>
</tr>
<tr>
<td>&gt;500</td>
<td>180.0</td>
<td>20</td>
</tr>
<tr>
<td>commercial</td>
<td>108.8</td>
<td>20</td>
</tr>
<tr>
<td>industrial</td>
<td>108.8</td>
<td>20</td>
</tr>
<tr>
<td>official</td>
<td>81.6</td>
<td>20</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Internal cash generation</td>
<td>25.8</td>
<td>101.9</td>
</tr>
<tr>
<td>Income before interest</td>
<td>3.4</td>
<td>58.3</td>
</tr>
<tr>
<td>Depreciation</td>
<td>22.4</td>
<td>24.2</td>
</tr>
<tr>
<td>Other provisions</td>
<td>19.4</td>
<td>78.2</td>
</tr>
<tr>
<td>Loans</td>
<td>15.4</td>
<td>99.6</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>64.3</td>
</tr>
<tr>
<td>Applications</td>
<td>41.2</td>
<td>265.8</td>
</tr>
<tr>
<td>Investment</td>
<td>71.3</td>
<td>295.4</td>
</tr>
<tr>
<td>Debt Service</td>
<td>24.8</td>
<td>34.5</td>
</tr>
<tr>
<td>Amortization</td>
<td>12.3</td>
<td>17.0</td>
</tr>
<tr>
<td>Interest</td>
<td>12.5</td>
<td>17.5</td>
</tr>
<tr>
<td>Increase in working capital</td>
<td>(54.9)</td>
<td>(64.1)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt service ratio</td>
<td>1.04</td>
<td>2.95</td>
</tr>
<tr>
<td>Contribution to investment (%)</td>
<td>1.40</td>
<td>22.82</td>
</tr>
<tr>
<td>ITEMS TO BE FINANCED</td>
<td>Sewer District</td>
<td>Rank</td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
<td>----------------</td>
<td>------</td>
</tr>
<tr>
<td>Collector Carrizal</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Collector San Jose - Boyaca</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Collector San Felipe</td>
<td>2/3</td>
<td>3</td>
</tr>
<tr>
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<td>Collector EL Castillo</td>
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FD: Final Design level
PF: Pre-feasibility level

Total Construction Costs: 656.39 US$ million
**Columbia**

**Barranquilla Water Supply and Sewerage Project**

*Schedule of Events for Course of Action Proposed by the Mission*

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JAIME DEVIS PEREIRA

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JAIME DEVIS PEREIRA
EMPRESAS PUBLICAS MUNICIPALES

COL 25
Mr. Alfonso Zavala, DC, LCPWS
C.G. Todd, FNA, LCPWS

COLOMBIA - Proposed Barranquilla Water Supply and
Sewerage Project

February 6, 1980

1. I called Mr. Alfredo Gutierrez, IBRD Resident Representative, in Bogota
on January 31, 1980 and he supplied the following information:

(a) IDB-the IDB Programs mission met on January 31, 1980 with
Planaccion. IDB was advised that they would not be requested
to fund Barranquilla;

(b) Feasibility Study-Mr. Gutierrez will try to find out how much
(if any) funding has been approved for this study through FORADE.
Mr. Stottmann will try to get a fair estimate of the cost of the
study. Mr. Gutierrez will advise him of FORADE's funding during
his February mission. If there is a sufficiently large gap
between cost, FORADE funding, and Barranquilla's capacity to pay,
we should be in a position to assess whether this cost could be
covered by Loan 1072-CO or if the difference would support a
separate effort.

2. The above information was solicited in this manner because I am unable
to participate in the planned February mission.

cc: Mr. Stottmann, LCPWS
CGto: dcsa

OFFICIAL FILE COPY
February 1, 1980

Dr. Jaime Denis Pereira  
General Manager  
Emisoras Públicas Municipales de Barranquilla (EPMB)  
Calle 32, No. 44-46  
Barranquilla, Colombia

RE: Barranquilla Water Supply and Sewerage Project

Dear Dr. Pereira:

First, we would like to thank you very much for the hospitality extended to Messrs. Stottmann and Bakovic during their mission to Barranquilla. It is the mission's assessment that due to higher than expected population growth, both sewerage and water supply services in Barranquilla continue to be deficient, although efforts are being made by EPMB to improve services through a project financed under our Loan 1072-CO to INSTUPAL. Substantial investments will be necessary in the near future to boost Barranquilla's water and sewerage service levels. We are pleased to learn that EPMB, local government authorities, and the private sector, as represented by the Promotors, have joined forces and are determined to bring adequate water and sewer services to the people of Barranquilla as soon as possible.

Realizing Barranquilla's desperate need for improved services and recognizing your firm commitment towards this goal, we would like to assure you of the Bank's willingness to assist you in your endeavor.

As the mission already told you, the Bank requires the preparation of a technically, financially, and economically sound investment program (feasibility study) before a project can be appraised and a loan granted. At the present time such a study does not exist, but we are pleased to learn that you have already taken the necessary steps to contract for a feasibility study with the objective to plan the future expansion of Barranquilla's sewerage and water supply system.

We repeat our uneasiness about the realization of the Las Flores project before the results of the feasibility study become available. We feel that it would not be wise to commit substantial funds to a project whose technical and economical justifications are not established by adequate preparatory work and detailed evaluation of other promising alternatives. Its execution prior to the results of the feasibility study could jeopardize Bank financing of the proposed project. In particular, we believe that the questions concerning the future water quality of the Magdalena River downstream of Barranquilla have not received adequate attention in the selection of the Las Flores scheme.

OFFICIAL FILE COPY
Instead, we would like to recommend to you an alternative proposal which has been presented to you already by our mission. The first and most important step under this plan would be to initiate and complete the feasibility study for water and sewerage as soon as possible. One of the most important objectives of the feasibility study would be the development of a series of emergency measures designed to alleviate at least some of the most urgent water shortages while a medium-term water supply system expansion is prepared and implemented. We believe that further optimization work at the existing water treatment plant and expansions in your water transmission and storage network, coupled with a determined effort to conserve water, could lead to substantial water service improvements at a probable cost noticeably below the estimate for the Las Flores Project. Financing of these improvements would come from EPMB, INEFOPAL and hopefully also from the Promotoras. We feel that it would be possible to commence work on the emergency measures in early 1981, if work on the feasibility study could begin before the middle of 1980.

The feasibility study would also identify a medium-term sewerage and water supply investment program which would include the works necessary to fulfill Barrancuilla's water and sewerage needs up to the year 1990. The Bank is prepared to consider the financing of this project, if preparatory work for this loan is carried out in a manner satisfactory to the Bank under the terms of reference recently discussed with our mission.

The key to a speedy implementation of our proposal is, of course, to initiate and complete the feasibility study and designs not later than March 31, 1981. The Bank is prepared to assist EPMB and its consultants in the preparation of the feasibility study to ensure that the results of this study satisfy the Bank's project evaluation requirements. We urge you to continue your efforts towards assuring the financing of this study from Fondo Nacional de Proyectos de Desarrollo and towards the establishment of a short list of competent national or international consulting firms.

While preparing for the new project, we strongly suggest devoting your energy and resources towards improving the efficiency of the existing system through a timely completion of the INEFOPAL II Project. We urge you to make every possible effort to cut down on EPMB's unaccounted-for water by continuing with the meter installation program, as increased metering of connections would not only increase revenues but also could reduce waste of water. In addition, we would like to see a continuation of the institutional and financial strengthening process already initiated under Loan 1072-00. In particular, we recommend that EPMB improve its control over accounting procedures and financial planning capabilities. A special effort should be made to improve the profitability of all of EPMB's public services with the ultimate goal to make all services financially self-sufficient. Since the
mission's departure you probably have continued your discussion on how to solve Barranquilla's urgent water supply and sewerage needs in the most speedy and efficient manner. Please let us know your current thinking on this matter.

We intend to send another mission to Barranquilla during the last week of February 1980 to review the execution of works financed under Loan 1072-CO, to further discuss the Bank's potential involvement in a future Barranquilla water supply and sewerage project, and if you wish, to advise you in the preparation of the feasibility study. By that time, we hope that we could define a course of action towards a fruitful cooperation between the Bank and EPMS with the common objective of bringing adequate water and sewerage services to Barranquilla as soon as possible.

Awaiting your reply, we remain,

Cordially,

Alfonso Zavala
Chief
Water Supply and Sewerage Division
Latin America and the Caribbean Regional Office

Cleared with and cc: Mr. Lecunza (LC2DB)

cc: Costa, Todd (LCWSD), Collelll (LEG), Orothe (CTR), Gutierrez (LAFCL)
WSotosmann:js US
## LAC PROJECTS DEPARTMENT
### ROUTING SLIP FOR DEPARTMENTAL USE ON REPORTS OTHER THAN APPRAISAL REPORTS

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<tr>
<th>Name</th>
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**Comments:**
1. Barranquilla is one of the cities included in the second INSFOPAL project (Loan 1072-CD). The Municipal Public Company of Barranquilla (EPMB) is performing satisfactorily (for the water supply and sewerage services) under the rate of return covenant on the lending agreement with INSFOPAL, but funds generated by these services are subsidizing other public services provided by EPMB.

2. This is a reserve FY81 project and a decision to appraise should be taken by February 1981 if project preparation continues as scheduled and EPMB agrees to proceed with the

**FROM:**

Alfonso Zavala, Division Chief, LCPWS

---

1/ Insert Name.
2/ Where points are flagged to or guidance sought from persons in the Central Projects Staff (CPS) or Projects Advisory Staff (PAS): their names should be listed.
3/ State if the report raises any issues; if so, indicate relevant paragraph numbers, and/or briefly describe the issue(s) involved.
emergency water supply program proposed by the mission. Please clear

3. A Project Brief cannot be produced at this point due to indefiniton
in project scope.
INTRODUCTION

1. In accordance with terms of reference dated October 24, 1979, we spent ten days in Colombia. We spent nine days in Barranquilla discussing the proposed project with the General Manager and staff of the Empresas Publicas Municipales de Barranquilla (EPM) and one day in Bogota to discuss the proposed project with the Instituto Nacional de Fomento Municipal (INSUFINAL). This memorandum contains a condensation of the most important findings of the mission.

SUMMARY OF FINDINGS

SYNOPSIS

2. EPM presented to the mission a request for financial assistance in the construction of a water supply and sewerage expansion program to meet Barranquilla’s water and sewerage needs until 1990. Preparatory work for this program is still at a very early stage. According to a first, very preliminary estimate the entire construction program would cost US$45 million at November 1979 prices; the cost for the sewerage component would be US$16.2 million and the water supply component would be US$28.8 million. EPM is in the process of contracting for a feasibility study covering both water supply and sewerage. The study is expected to be completed in early 1981 and would form the basis for Bank appraisal.

3. In order to alleviate the most urgent water needs in some parts of the city as soon as possible, EPMs and private interests involved in the housing development business are preparing the designs for a US$11.5 million first stage water supply project. Construction of this project is to start as soon as EPMs and the private interests can secure financing. EPMs requested that this project be included retroactively into a future Bank loan. The mission indicated to EPMs that such retroactive financing would not be compatible with Bank lending procedures. In addition, the mission objected to the construction of the first stage since it cannot be justified sufficiently on technical grounds prior to the completion of the feasibility study.

4. The mission proposed to EPMs an alternative course of action under which the first stage project would be replaced by an emergency water supply system improvement program to be identified by the feasibility study. Being under pressure from private interests and local governmental authorities, EPMs was reluctant to accept the mission’s proposal fearing that the course
of action proposed by the mission would delay the implementation of its water supply system expansion program. The mission feels that EPMH will go ahead with the first stage water supply project, if financing can be put together within the next four months. In any case, this operation is contingent to EPMH's fulfillment of its commitments to INSUFAL under the onlending agreement signed within the context of the Bank loan 1072-00.

Project Execution Under Loan 1072-00

5. A loan for a water supply and sewerage project would be the second Bank operation in the sector in Barranquilla. The first operation was Loan 1072-00 under which a portion of US$10.0 million was provided as a Bank loan for improvements and expansion of the city's water supply and sewerage systems. Loan 1072-00 became effective (as a subloan to Barranquilla) on January 16, 1975 and was executed through INSUFAL with EPMH as subborrower. The performance of EPMH and INSUFAL under Loan 1072-00 has been plagued by excessive delays and subsequent cost overruns caused by inadequate project preparation and frequent changes in EPMH's management and the Colombian government's failure to provide the pledged counterpart funds in a timely fashion. The project scope and description were substantially changed in 1976 with the Bank water supply resident specialist's concurrence in response to a request from the Colombian government. The sewerage component was reduced drastically in favor of an expansion of the production capacity of the existing water treatment plant to cope with increased demands in the city. A change in the subproject description is now officially being requested by INSUFAL. Recently, EPMH and the government made an energetic effort to advance the progress of this project. Completion is now scheduled for December 1980. The total cost of the program under implementation is Col15760 million at current prices during the implementation period, as compared with the appraisal estimate of Col16609 million. This shows the effort that the Colombian government, INSUFAL, and EPMH are making to bring Loan 1072-00 to a reasonably successful completion.

Need for New Investment Program

6. Severe deficiencies exist in Barranquilla's water supply (Annex 3) and sewerage system (Annex 4) in spite of the efforts being made under the subproject financed under Loan 1072-00. These deficiencies affect the urban poor as well as the high-income segment of the city's population. At present only 63% of the people have access to a piped water supply; lack of water is stifling planned housing developments in many areas of Barranquilla. Likewise, sewerage services reach only 40% of the population and are almost nonexistent in several parts of the city. Discharges of sewage into open stormwater drainage canals due to insufficient sewer system capacity has created unsanitary conditions in various areas. In spite of important improvement works financed under Loan 1072-00, the deficiencies in water and sewerage services will remain critical. The need for a substantial investment program for water supply and sewerage system expansion is justified.
The Project Proposed by EPMB (Sewage Component)

7. EPMB proposed to the mission a US$16.2 million sewerage system expansion program to be constructed during the next four years. The investment program includes the construction of 12 major sewer interceptors with a combined length of about 45 km, a sewage pumping station, and an oxidation pond. The program would satisfy Barranquilla’s sewage carrying capacity until 1990. The main beneficiaries of the sewer program would be the low-income groups of Barranquilla’s population. The construction of interceptors in some districts with urgent needs was originally included in Loan 1072-DO, but had to be omitted during the implementation of the project, due to urgent water supply priorities. Although some adjustments will be necessary, the final design for these interceptors is completed and cost estimates can be considered reliable; the preparation of the remaining works is in its earliest stages. Cost estimates quoted by EPMB (Annex 6) are no more than a first guess. More planning and design work is necessary to advance the proposed sewerage project to the appraisal stage. EPMB is in the process of contracting for a feasibility study to be completed by March 1981. 

The Project Proposed by EPMB (Water Supply Component)

8. EPMB’s local consultant, Sanlor y Vizno Ltda., in association with Gomez, Cajiao Aso. y Cia. Ltda., presented to the mission a plan for a US$28.8 million (November 1979 prices) expansion program for Barranquilla’s water supply system. In this plan the consultant states that Barranquilla’s future water supply system expansion strategy should be based on the construction of a new water treatment plant to be built at a location known as Las Flores. The new plant would be located on the northern periphery of Barranquilla and would process Magdalena River water pumped from an intake located approximately 5 km downstream of the present city limits. Although based on a now outdated water supply system master plan (prepared in 1973), the consultant’s plan in its present state has no adequate engineering justification and presents no serious study to consider other alternatives.

9. The mission questions very seriously the technical soundness of the proposal. In particular, the mission believes that the choice of the location of the new treatment plant downstream of Barranquilla could make the plant vulnerable to future water quality deteriorations in the Magdalena River which undoubtedly will result from increased future waste discharges. Although flows in the Magdalena River are quite high, it is possible that the water quality in the River may deteriorate to such a degree that treatment of river water for human consumption could become questionable. The mission feels that it is essential to investigate this issue before the selection of a new treatment plant site is finalized. EPMB realizes the need for more study and is at present in the process of initiating a feasibility study with the objective to identify an optimal solution for Barranquilla’s future water supply system expansion.
10. In view of the existing water supply emergency situation in Barranquilla, private interests have created the Promotora, a private non-profit corporation with the objective to promote immediate solutions to the cities' water supply problems. The membership of the Promotora consists mainly of private enterprises involved in the land development business. The Promotora has the backing of local governmental authorities and a close relationship with EPMB. In fact, the general manager of EPMB is also the President of the Promotora.

11. Although recognizing the need for more adequate planning, EPMB and the Promotora are not willing to wait for the feasibility study's results and contemplate to construct as soon as possible a first stage of the water supply system expansion plan proposed by the consultants. This first stage expansion plan would include the first stage of the treatment plant at Las Flores with a capacity of 750 l/sec, 20 km of transmission mains and two storage tanks with a combined capacity of 16,000 m³. About a third of the water produced at the new plant would be used to fulfill the demand created by new housing projects planned for construction on the northern and northwestern periphery of Barranquilla. A total of 100,000 people, including all income groups, would benefit directly from this first stage program through new connections. The remaining water would be injected into the existing distribution system thus helping to improve water supply services throughout the city.

12. The total cost for the first stage expansion project is estimated to be US$11.5 million (prices of November 1979), US$7.0 million for the new treatment plant and US$4.5 million for the distribution mains and storage tanks. According to a preliminary financing plan, the Promotora would raise from private sources the money needed to finance the treatment plant and EPMB would finance the remaining works out of their own internal cash generation. Construction of the first stage would begin as soon as financing can be put together. EPMB and the Promotora intend to complete the project in less than two years and are negotiating with the water supply industrial firm, Degrémont of Bogota, for a turnkey contract. EPMB requested that the first stage project be included retroactively into a bank loan made to assist in the financing of the medium-term water supply system expansion program.

The Mission's Proposal

13. The mission rejected the proposal of EPMB/Promotora to go ahead with the construction of the first stage project prior to the completion of the feasibility study. The mission feels very strongly that it would not be wise for EPMB to commit substantial funds to a project without sufficient technical and economic justifications and the assurance that the proposed first stage project may be integrated smoothly into a future lower-cost medium-term water supply system expansion plan, as determined by the feasibility study.

14. Instead, the mission presented an alternative proposal which takes into account both the urgency for immediate water supply service improvements and the need for a comprehensive feasibility study. A timetable for the major activities of the mission's plan is presented in Annex 7. The central point of
the mission’s proposal is for EPMB to contract for and complete a feasibility study for both water supply and sewerage as soon as possible. EPMB has already prepared acceptable terms of reference for such a study and is in the process of seeking financing for the study from the Fonda Nacional de Proyectos de Desarrollo (FONADE). Since FONADE has already approved the terms of reference, a reasonable target date for the work to begin on the proposed study appears to be May 1, 1980. The study could be completed in early 1981.

15. One of the objectives of the feasibility study would be to develop an emergency program consistent with the medium-term water supply expansion plan to be proposed at the feasibility stage. The mission believes that further optimization work at the existing water treatment plant and further studies to optimize and expand the transmission and distribution network may bring a good deal of desired improvements in water supply services faster and at less cost than the construction of the first stage project proposed by EPMB/Promotora. The target date for the completion of this phase of the feasibility study would be the end of November 1980. The design of the emergency measures would be completed three months later (February 1981).

The realization of the emergency program could begin in early 1981 with financing coming from EPMB, the Promotora and IBSPFAG through national counterpart funds released under Loan 1072-Co.

16. Another result of the feasibility study would be a medium-term investment program for both water supply and sewerage which would meet Barranquilla’s needs up to the year 1990. The design of the first water supply components of this program could start in January 1981 and the design for all proposed water supply and most of the sewerage works could be completed by the end of the third quarter of 1981. The design of some of the sewerage components such as the program for sewer district 11 could be delayed until 1982 or even later since these components would be constructed last in the medium-term investment program. The medium-term water supply and sewerage expansion program would be financed by a new bank loan. The project could be appraised in the first quarter of 1981 when the feasibility study is nearing completion and all information necessary for an appraisal would be available. The new loan could become effective by the middle of 1981 and construction could begin thereafter.

17. EPMB reacted favorably to the mission’s proposal but was reluctant to endorse the proposal outright. The promotora indicated that it would continue to press for the immediate construction of the Las Flores project and would not wait for the completion of a feasibility study. EPMB has also approached the Inter-American Bank (IIB) for financial assistance. Nevertheless, the mission is confident that EPMB will understand the necessity of adequate planning and follow the course of action proposed by the mission. In the opinion of the mission it is more than likely that EPMB and the Promotora will not be able to put together the financing package for the first phase of the project in time and also will eventually adopt the proposal of the mission. In that case the Promotora could be expected to contribute some private sector funds towards the financing of the emergency project.
18. INSFOPAL supports the mission's proposal. Actually, the idea to use loan 1077-C0 as a vehicle for financing the water supply emergency measures originated during this mission's discussions with INSFOPAL. In addition, INSFOPAL indicated its willingness to possibly make available additional counterpart funds under loan 1077-C0 for the construction of the emergency program, since the government considers the improvement of water and sewerage services in Baranquilla a high priority item.

19. EPMB requested specifically that any future Bank loans should be given without INSFOPAL as an intermediary. INSFOPAL and the local governmental authorities did not voice any objections to EPMB's request.

Institutional Aspects

20. Traditionally, EPMB has been a weak institution. Higher management positions have been filled for the most part with political appointees. Turnover in management positions was high, thus leaving EPMB without continuity in its leadership. Organization, management and coordination are still poor; in-house technical and financial planning capabilities are weak. The situation has somewhat improved with the arrival of a new management team of young and energetic professionals. There is hope that the frequent turnover of management personnel will stop and the institution will further improve as the current managers gain more experience. Nevertheless, any future Bank loans should include a comprehensive technical and management assistance program.

Financial Aspects

21. In the past EPMB's water and sewerage services have generated profits which were used to subsidize other deficit services. For example, in FY78 the combined losses for five services were CO$5215.5 million. Street cleaning and garbage collection experienced the highest losses (CO$146.6 million) followed by street paving (CO$135.2 million), market operation (CO$113.3 million), zoological garden (CO$121.6 million), and maintenance of public parks (CO$18.2 million). During the same period sewerage services generated CO$1067.7 million, water supply services generated CO$524.5 million and the slaughterhouse operation generated CO$107.2 million. Property taxes and vehicle taxes added CO$635.3 million, leaving EPMB with a net loss for FY78 of CO$1884.0 million. These numbers point to a precarious and unhealthy financial position of EPMB. EPMB has to discontinue the practice of intra-service subsidization and trying to correct the situation in the deficitary services. EPMB is actively trying to raise tariffs for all services. During the mission's visit in Baranquilla, EPMB was able to obtain a court order giving EPMB the right to increase tariffs in its most deficitary operation which is garbage collection. After three months of a government imposed freeze, EPMB has submitted to the Junta Nacional de Tarifas a request for tariff increases in the water supply and sewerage sector which would raise revenues by 82% compared to 1979 levels. The Junta's reaction to EPMB's request is expected in February or March 1980.
22. Financial reporting and accounting is inefficient and unreliable. To improve this situation and establish adequate financial procedures after the discontinuation of the intra-service subsidization program will require assistance by experienced financial advisors. A more detailed description of EPMB’s institutional and financial performance is presented in Annex 5.

Main Project Issues

23. As a result of this first reconnaissance mission, we draw attention to the following major issues concerning a future water supply and sewerage project in Barranquilla:

(a) preparatory work for the proposed project is not sufficiently advanced to define the scope of work and a firm project cost. EPMB is in the process of contracting for a water supply and sewerage feasibility study, which if EPMB can obtain financing for the study from FORADE by May 1980, could be essentially completed by March 1981. The feasibility study would generate the information necessary for Bank appraisal;

(b) realization of the intention of EPMB and the Promotors to go ahead with a first stage project without sufficient technical justification and against the Bank’s objections could jeopardize Bank participation in the proposed project;

(c) financing of the water supply emergency program proposed by the mission may become problematic, especially if the Promotors would decide not to contribute;

(d) EPMB’s organizational and administrative weaknesses would make technical assistance imperative in that area;

(e) frequent turnover in management positions due to political appointments present a severe obstacle to build a more successful institution;

(f) EPMB’s financial position is weak due to the deficitary operation of all of EPMB’s services other than water supply and sewerage, and

(g) EPMB subsidizes deficitary services from profits generated by water supply and sewerage services. This practice must be discontinued, a move which would necessitate a complete restructuring of EPMB’s financial system and operation.

Recommendations for Future Course of Action

24. The mission feels that there are two phases for future Bank action. Action taken during Phase I should be designed to assist EPMB in making a decision about its future course of action. Hopefully, EPMB’s decision would be the acceptance of the Bank’s project implementation proposal presented in
paragraphs 13 through 16. Once EPMB has committed itself to follow the Bank's proposal, Phase II begins. During this phase, the Bank would assist EPMB in the preparation of the project towards appraisal.

25. The following specific Bank initiatives recommended to be taken under the Phase I action program are:

(a) coordinate with IDB on Barranquilla Water Supply and Sewerage Project;

(b) to send a letter to EPMB outlining the Bank's proposal and assure EPMB that the Bank will continue to give advise to them in preparing the project and request EPMB to proceed with the feasibility study by May 1980 (Annex 1, Attachment 1);

(c) follow up with a visit of the Bank's resident representative to Barranquilla towards the end of January, as agreed during the mission's meeting with Mr. Bentjerdal, the Bank's Assistant Resident Representative in Bogotá;

(d) visit EPMB briefly again in February or March 1980 to further discuss the project with EPMB's management; and

(e) review and comment on the terms of reference prepared by EPMB for the water supply and sewerage feasibility study. This has been done and comments were sent by cable (Annex 1, Attachment 2);

26. Bank actions during Phase II would include:

(a) sending a major mission during the fourth quarter of 1980 to evaluate proposals for the emergency construction program and discuss arrangements for financing under Loan 1072-CO;

(b) visits to EPMB at regular intervals (four months, preferably during supervision of Loan 1072-CO) to review progress in EPMB's project preparation work (maximum of two visits required); and

(c) regular project preparation work; the decision to appraise would be taken in early 1981.

cc: Wessels (LCFDH), Van der Meer (LCFDH), Favilla (LCZDB), Costa (LCZWS), Goldman (LCZDB), Rajagopalan (PAS) (3), Willoughby (TMT) (3), Chittleborough (EDC), Collell (EDC), Grothe (CTB), Gutierrez (LAFCL), D'even (LCFDH), LACIC
EMPRESAS PUBLICAS MUNICIPALES DE BARRANQUILLA

BARRANQUILLA, COLOMBIA

SR. JAIME DEVIS PEREIRA, GERENTE GENERAL. AFTER REVIEW FIND TERMS OF REFERENCE FOR PROPOSED FEASIBILITY STUDY ADEQUATE. FOR REQUEST FOR PROPOSAL ADD BRIEF DESCRIPTION OF EXISTING SITUATION AND PROBLEMS AND GENERAL OBJECTIVES (EMERGENCY MEDIUM AND LONG-TERM PROGRAM). ENCOURAGE YOU TO CONTRACT FOR STUDY AS SOON AS POSSIBLE. LETTER FollowS SOON. REGARDS STOTTMANN

INTBAFRAD

Baranquilla Water Supply

CLEARANCES AND COPY DISTRIBUTION: DRAFTED BY
cc: Todd(LCPWS), Gutierrez(LAFCL),
Lezama (LU200)

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DEPARTMENT

LAC Projects

SECTION BELOW FOR USE OF CABLE SECTION

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Barranquilla, diciembre 4 de 1979

Agradecemos la oportunidad que se nos brinda de hacer llegar al señor Walter Stottmann por su intermedio de la información complementaria que nos fue solicitada y relativa a un nuevo crédito para Barranquilla, así como al doctor Emilio Rodríguez de algunos documentos relacionados con el desarrollo del Bifp II para Barranquilla.

Atte.,

Eduardo Peralta Zendejas

GRUPO CONSULTOR
BENIGNO Y VIANA LTDA. - DOMICILIO: CUNDINAMARCA D. I. L. T. A.
OFFICE MEMORANDUM

TO: Messrs. W. Scottmann, EGR, LCPS and J.M. Bakovic, FNA
FROM: Alfonso Zavala, Chief, LCPS
SUBJECT: COLOMBIA-Barranquilla Water Supply and Sewerage Project
Reconnaissance Mission

October 26, 1979

1. You should plan to arrive in Barranquilla on or about November 11, 1979 and spend about two weeks in Colombia to gather information on the above-mentioned project. You should hold discussions with officials of the Empresas Públicas Municipales de Barranquilla (EPMB), the Instituto Nacional de Fomento Municipal (INIFOM), and if necessary the Departamento Nacional de Planeación.

2. The main objectives of your mission should be to:
   (a) review the technical, institutional and financial aspects of the proposed project and status of preparation;
   (b) identify main technical, institutional and financial issues concerning the project; and
   (c) prepare a critical path of events necessary to advance the project to the appraisal stage.

3. In particular, you should perform the following tasks:
   Technical Aspects
   (a) review existing water supply and sewerage services in Barranquilla;
   (b) review and assess existing and future demand for water and sewerage services;
   (c) discuss with EPMB the technical components of the proposed project and prepare a description of the planned works;
   (d) assess project rationale and identify beneficiaries;
   (e) review and assess the present status of design and engineering for the proposed project;
   (f) prepare preliminary cost estimates;
   (g) identify design and engineering work necessary to advance project preparation to appraisal stage;
   (h) assess EPMB’s capability to prepare project and identify need for technical assistance;
   (i) identify main technical issues connected with the proposed project; and
(j) assess relationship between proposed project and previously financed Bank projects.

Institutional/Financial Aspects

(a) review EMPD's institutional arrangement and organization;
(b) review EMPD's personnel and their qualifications;
(c) review and assess the capabilities and attitudes of the existing management;
(d) identify need for technical assistance in organization and management;
(e) review and assess the historical, existing and projected financial position of EMPD (separately for each activity);
(f) review and assess existing tariff structures for each activity;
(g) review and assess existing accounting and auditing practices;
(h) discuss with EMPD and INTEFOPAL a potential financing plan; and
(i) identify and assess main institutional/financial issues connected with the proposed project.

4. Mr. Stottmann will be responsible for the general coordination of the mission and the technical aspects of the project. Mr. Bakovic will be responsible for the institutional and financial aspects.

5. Upon arrival in Colombia, you will contact the resident representative of the Bank in Bogotá and inform him of the purpose of the mission and you will keep him informed on the progress of your work and findings.

6. Upon your return to Headquarters, you should prepare a back-to-office report or, if collected information grants it, a project brief.

Cleared with and cc: Mr. Favilla (LCIDB)

cc: Wessels (CLPDR), Goldman (LCIDB), Rajagopalan (PAS) (3), Willoughby (TWT) (3), Costa (LCIDB), Chittleburgh (EDC), Colliell (LEG), Grothe (CTR), Scott (LAPCL), Wilson (LCFWS), LAC files

WStottmann:js 45
Mr. Alfonso Zavala, Chief, LCPWS

Walter Stottmann, ECR, LCPWS

COLOMBIA-Reconnaissance Mission to Barranquilla for a Proposed Water Supply and Sewerage Project

1. I am scheduled to visit Barranquilla and Bogotá from November 12-23, 1979 to gather information on the proposed Barranquilla Water Supply and Sewerage Project. Mr. Cugoski, a consultant from Cochambamba, Bolivia, will accompany me as financial analyst.

2. I have prepared and attached a preliminary outline of topics to be covered during this mission. Since this will be my first mission of this kind, I would like to discuss this outline with you.
TENTATIVE OUTLINE OF TOPICS TO BE COVERED

A. Sectoral Context (Colombia)
1. Country background
2. Present service levels, water supply and sewerage
3. Service level goals
4. Sector organization
5. Financing of sector activities
6. Previous Bank involvement
7. Principal sector issues and constraints

B. Sector Services and Demands in Project Area
1. Location
2. Sector agencies
3. Existing water supply and sewerage systems
4. Population: past, present, future
5. Socio-economic indicators
6. Present water supply services
   a. amount and quality of water produced
   b. number of connections, people served
   c. consumption levels
   d. unaccounted-for water
   e. quality of services
   f. services for urban poor
   g. specific problems, issues, and constraints
7. Present sewerage services
   a. level of connections
   b. quality of service
   c. water pollution problems
      i. in city
      ii. downstream
   d. specific problems and constraints

8. Future demand for water supply services
   a. projected water demands
   b. projected service levels
   c. short and long-term water supply development strategies and
      possibilities
      i. treatment
      ii. distribution
   iii. house connections

9. Future demand for waste water disposal services
   a. projected waste water levels
   b. short and long-term waste water disposal strategies
      i. treatment
      ii. sewerage system layout
      iii. connections
C. The Borrower (Empresas Públicas Municipales de Barranquilla)
   1. Institutional arrangement and organization
   2. Activities
   3. Financial history and present financial position
   4. Performance on previous Bank loans
   5. Management capabilities and attitude
   6. Planning potential
   7. Accounting practices
   8. Auditing practices
   9. Personnel data and policy
   10. Professional qualification of personnel
   11. Training of personnel
   12. Tariff structure
   13. Existing Institution Building Program

D. The Project
   1. Project Origin
   2. Objectives - long and short-term
      a. population to be served
      b. quality of services to be provided
   3. Technological Alternatives and Justifications
   4. Description of project components for which financing is sought
      a. institutional
      b. organizational
      c. technical
   5. Status of design and planning for project components
   6. Cost estimates
   7. Project financing (bank, local, co-financing)
   8. Implementation
      a. technical preparation; what has to be done and by whom to advance project to appraisal stage? technical assistance?
      b. institutional/legal issues (INSUPAL)
      c. financing arrangements
   9. Need and justification for Bank support

E. Main Project Issues and Recommendations
   1. Technical
   2. Institutional
   3. Financial

F. Path For Project Preparation
   1. Schedules of events showing dates and responsibilities to advance project to appraisal stage.