BORDER ENVIRONMENT COOPERATION COMMISSION

CITY OF CALEXICO, CALIFORNIA

STEP II

PDF Format

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BORDER ENVIRONMENT

COOPERATION COMMISSION

STEP II

(Full Proposal)

FORM FOR DETAILED PRESENTATION OF PROJECTS FOR CERTIFICATION

Executive Summary

Calexico is a City of approximately 26,354 residents in 1997 (with a 4% to 5% annual growth rate), it covers an area of approximately 3 ½ square miles and was incorporated in 1908. It is located 230 miles southeast of Los Angeles, 680 miles southeast of San Francisco, 125 miles east of San Diego, 260 miles west of Phoenix, and is adjacent to the City of Mexicali, Baja California, Mexico, with a population of approximately 1.0 million.

Calexico obtains its drinking water from a surface water supply, the Colorado River. The City follows water quality standards established by the United States Environmental Protection Agency and the State of California Department of Health Services Office of Drinking Water. Current water quality requirements have been established in the 1986 Safe Drinking Water Act Amendment and the Surface Water Treatment Rule.

The City's water treatment plant, called Plant A, was initially constructed in 1949 with primary facilities consisting of a clarifiers, filters and disinfection system. In 1965 the treatment plant was expanded, and Plant B consisting of another clarifier and a "Greenleaf" filter, was added in 1968. In 1990, the Plant A clarifier was refurbished and the filter was converted to a conventional type multi-media filter.

In January 1997, the California Department of Health Services, Drinking water field operations branch conducted an annual Field Inspection. It was during this inspection that various deficiencies were found.

Problems at the existing facility can be resolved with the expansion of the plant. The State strongly encouraged that the City expands the plant in order to correct these deficiencies.

The City is seeking the maximum amount of BEIF funds for improvements to Water Treatment Plant and Distribution System, Phases I and II, Phase III however, is planned to be funded by a loan from the State Revolving Fund (SRF). Originally this application was submitted for Phases I, II and III. More specifically the Project consists of :

Phase I: Construction of additional water filtration capacity of six million gallons per day (MGD) and additional distribution pumps at the filtration plant located at 545 Pierce Avenue, Calexico. It is proposed that the improvements to be made will increase the current treatment capacity of 10 MGD to a capacity of 16 MGD. An ultimate capacity of 20 mgd is visualized.

Phase II: The Project will also provide construction of a 24-inch diameter distribution main from Highway 111 east along the south side of the All American Canal and north on Bowker Road.

Phase III: The Project will also provide a six million gallon treated water storage reservoir and a satellite pump station along Bowker Road north of the All American Canal.

Phase II is a continuation of a project funded by the Economic Development Administration in 1992 which consisted of a 24-inch diamter distribution main that runs north along Pierce Avenue to the south-side of the All American Canal and east to Highway 111.

Many of the plant treatment facilities are almost 50 years old and are approaching the end of their useful life. Also as part of the annual inspection, The California Department of Health Services Office of Drinking Water has identified numerous deficiencies in the treatment plant that compromise the ability to provide properly treated and disinfected drinking water that meet the current applicable regulations on a continuous basis. Major deficiencies include:

1. The Plant A clarifier is 300% hydraulically overloaded and the Plant B clarifier is 200% hydraulically overloaded.

2. The Plant B "Greenleaf" filters in its present configuration is not an acceptable filtering system that meets the Health Department's present requirements.

3. The existing chemicals feed systems are inadequate and must be improved. Aqua-ammonia facilities must be added to stop the formation of disinfected by products.

1. Auxiliary equipment such as turbidimeters and filter to waste capabilities must be incorporated into the plant.

In order to comply with the current regulations and correct the above deficiencies, the major proposed facilities will incorporate the following:

1. New clarifier - This will reduce the hydraulic loading of the existing clarifiers to acceptable levels.

2. New multimedia filters with state-of-the art monitoring and operational schemes. These filters will replace the existing obsolete and unacceptable "Greenleaf" filters.

3. Improved chemical feed systems with the addition of an aqua-ammonia storage and feed system.

4. Necessary electrical system improvements, piping and valving modifications and auxiliary equipment to make the new facilities completely functional and

operational

PROJECT TYPE

a. Water Supply

b. Expansion and Rehabilitation Project

c. Public Sector

PROJECT TITLE

Water System Improvements Project, Phases I, II and III

PROJECT DESCRIPTION

The City is proposing improvements to the City□s Water Treatment Plant and distribution system which are estimated to address the City□s current deficiencies at the Water Treatment Plant and growth through the year 2015.

The Project consists of three phases:

Phase I: Construction of additional filtration capacity of six million gallons per day (MGD), additional distribution pumps at the filtration plant located at 545 Pierce Avenue, Calexico, rehabilitation of Plant B Clarifier, construction of a new Plant C clarifier, construction of new filters with 12 MGD capacity, conversion of existing Plant B Greenleaf filter tank to a backwash recovery tank, construction of three new evaporation basins, and addition of new distribution system pumps, associated pumps, valves and piping. It is proposed that the improvements to be made will increase the current treatment capacity of 10 MGD to a capacity of 16 MGD. An ultimate capacity of 20 mgd is visualized.

Phase II: Construction of a 24 inch diameter distribution main from Highway 111 east along the south side of the All American Canal and north on the east side of Bowker Road.

Phase III: A six million gallon treated water storage reservoir and a satellite pump station along Bowker Road north of the All American Canal.

With these improvements, the City of Calexico will correct deficiencies and be able to maintain fire flows of 4,000-5,000 gallons per minute (gpm) for industrial and commercial growth in the northeast quadrant of the City. This area of the City is where the major commercial and industrial developments are planned.

PRIMARY APPLICANT INFORMATION

D. Name of Organization: CITY OF CALEXICO

Name of Contact Person: MARIANO MARTINEZ

PUBLIC WORKS DIRECTOR

Address: 608 HEBER AVENUE, CALEXICO, CA 92231

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1. GENERAL PROJECT DESCRIPTION

a. Project Location: California, U.S.A. **Site Location**: Urban Area

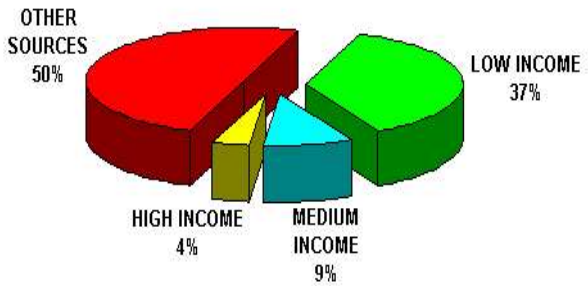
b. Description of Project Location

i. Describe Geographical Location of Project and Area of Impact

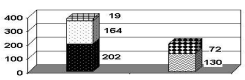
The project will be located in the City of Calexico which is a center of international trade. It is located on the United States/Mexico border, approximately 140 miles inland from the Pacific Ocean (Chart1-0). Calexico is one of the busiest border crossings between the United States and Mexico. Population of the City is approximately 26,534 persons. It is located immediately north of Mexicali, B.C. Mexicali has a population of approximately 1.0 million persons. Calexico is at the southern end of the Imperial Valley. Agricultural activity is carried by means of irrigation with water from the Colorado River.

Topography is exceedingly flat, sloping approximately five feet per mile to the northwest. Much of the area within the City is below sea level. Rainfall is in the order of three inches per year. Summer temperatures vary. They are normally in the nineties and low one hundreds. There are frequent days when the temperature reaches 120 degrees. The area of impact of the project is made up of the present City limits of Calexico and land within the Calexico Sphere of Influence. The latter is considered likely to annex to the City within the next ten to fifteen years.

Chart 1-0



Location Map



ii. Suitability of Proposed Site

The sites required by the project are ideally suited to their proposed use. Adequate, unoccupied space and rights-of-way are readily available. The site of the existing water filtration plant is large enough to accommodate the additional units required

for this project. The water delivery, treatment, and distribution facilities presently in place can easily serve the additional capacity resulting from this project.

The route of the distribution main is proposed to be parallel to the All American Canal operated by the Imperial Irrigation District (IID) (Exhibit 1-3). This alignment is clear of all interferences and readily accessible for construction purposes. The location of the booster pump station and new storage reservoir is on open land presently owned by IID. Preliminary conversations with that district indicate that there will be not difficulty in negotiating the purchase of this property.

c. **Environmental Issue**

It is not anticipated that there will be any environmental objections to the proposed project. Construction will take place on land already utilized for public purposes. No archaeological or historical sites will be disturbed. There will be no disruption of endangered species. The City of Calexico Council certified this Negative Declaration on August 5, 1997, which was filed with the county clerk on August 28, 1997. The State of California Clearinghouse indicated compliance with CEQA a second time in January, 1998.

On December 23, 1997, a Finding of No Significant Impact (FONSI) was published for public review by the EPA Region 9 Administrator. The project will not involve any negative transboundary environmental impacts and may contribute to a reduction of potential health risks associated with an insecure water supply, especially for the 80,000 people/day visiting Calexico from Mexico.

d. **Project Alternatives**

The provision of additional water treatment, distribution, and storage facilities is an absolute necessity per the annual inspection report received from Department of Health Services, Drinking Water Field Operations Branch (Exhibit 2-1), provided the City of Calexico is to grow in accordance with its General Master Plan (Appendix A). Also, part of this report states that the City□s current storage of treated water has less than one day□s water reserve in case of an emergency.

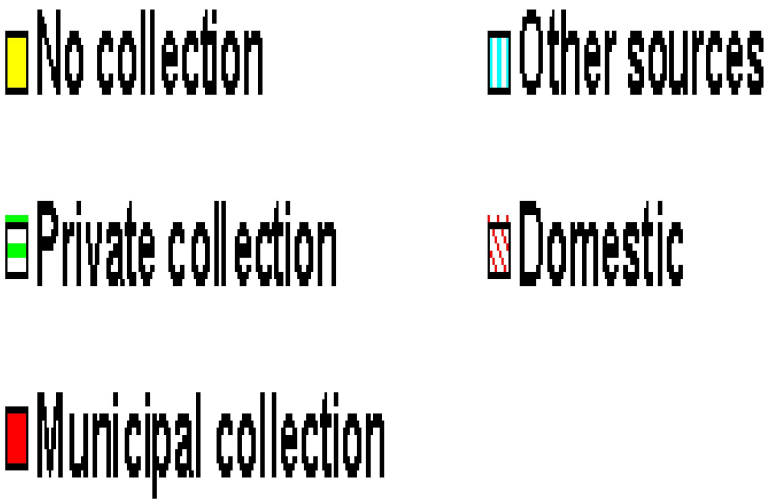


Table 1-1

Proposed Engineering Design and Construction Costs

1 Phase I of the Engineering on the Project was funded through a grant received from the Enterprise Community Program.

A **"No Project"** alternative would mean that the City would not be in compliance with the Department of Health Services, Drinking Water Field Operations Branch rules and regulations. Non-compliance would have an adverse impact on the City itself and on International Trade.

e. **Project Justification**

This project is needed primarily to correct the deficiencies found on January, 1997 when Department of Health Services (DHS) conducted a sanitary survey of the City of Calexico Filtration Plant and the City□s drinking water system. Overall, it was found that the system is professionally operated and maintained. However, the DHS reported a list of concerns where the most important were:

1. Deficiencies noted at the surface water treatment plant

2. The consequent need to expand the plant.

The DHS noted that the plant expansion will correct some of the items described in the Deficiency List and strongly encouraged the City to proceed with the improvements. It is proposed that the improvements to be made will increase the current treatment capacity of 10 MGD to a capacity of 16 MGD. An ultimate capacity of 20 mgd is visualized. A summary of the deficiencies that directly aim to the Plant expansion are listed as follows:

A. Water Treatment Plant Filtration Issues:

1. All new filtration and disinfection facilities should be designed and built to achieve an average daily effluent turbidity goal of 0.2 NTU (Cryptosporidium Action Plan)

2. There is the recommendation of rebuilding the Control System for Plant B, since the current facility is old and no spare parts are available.

3. The WTP Clarifiers are hydraulically overloaded, currently they work at 200% (Plant A) and 150% (Plant B) over the recommended design standards in terms of maximum weir loading rate and detention time. To solve this problem, the department of health services recommended the expansion.

4. The flow splitter box for clarifiers A and B needs to be demolished and modulating flow control valves be installed.

5. If no new filtration is built, a backwash water polymer chemical feed system will need to be provided.

6. A working continuous disinfection residual analyzer for chlorine is recommended to add into the computer system.

B. Water Treatment Plant Expansion Issues:

1. The DHS recommended a gradual flow circulation to avoid changes that upset the filtration performance. The chemical feed control, currently manual, should be flow controlled, i.e., chemical dosage control during on/off operation of the backwash recovery system. It is proposed that the improvements to be made will give a capacity of 16 mgd.

2. The WTP Clarifiers are hydraulically overloaded, currently they work at 200% (Plant A) and 150% (Plant B) over the recommended design standards in terms of maximum weir loading rate and detention time. To solve this problem, the department of health services recommended the expansion.

Backwash Benefits

Currently, backwash water from the existing filters is discharged to the New River. Utilization of the existing Plant B Filter tank represents an opportunity to possibly recover 750,000 GPD of water that would otherwise be discharged to the River.

The Backwash Recovery Tank meets two main purposes; 1) equalization of backwash water and 2) additional solids removal. Equalization of backwash will allow the returned flow to be fed into the plant raw water flow at a steady rate. Additionally, while backwash is retained in the Backwash Recovery Tank, additional solids will settle and can be conveyed to the Evaporation Basins. This will reduce re-circulation of solids to the plant influent.

Backwash flows from the proposed new filter will flow by gravity into the tank. Alum will be added to assist settling. After traveling the length of the basin, new pumps will be installed in the existing clear well to convey the recovered backwash to the plant influent.

The floor of the basin will be modified to slope to a point where solids can be collected. The existing 24-inch backwash drain will be used to convey the collected solids to the Evaporation Basins. Additionally, the backwash drain will be used as an emergency overflow for the Backwash Recovery Tank.

Secondly, if these improvements to the plant are not made, Calexico would be unable to develop according to the General Plan, hereby hindering Calexico□s position as a major focal point in International trade with Mexico.

f. **Transboundary Aspects**

Federal and State planning contemplate that the new border crossing at Calexico will be a major commercial link between Mexico and the United States. The possibility that Calexico would not be able to develop sufficiently to provide facilities to service border traffic would prevent the realization of this major planning concept. Phase II and III of the proposed project will enable the City to maintain its growth rate and to provide support services on the U.S. side of the border to match those to be built in Mexico.

g. **Table 1-2**

Project Work Tasks

Work Task	**Time Frame**
Phase I (Work is carried out simultaneously)	
Construct New 80 foot Diameter Clarifier	6 Months
Construct New Filters with 12 mgd Capacity	6 Months
Chemical Addition Equipment and Piping	6 Months
New Distribution Pump	4 Months

Associated Pumps, Valves and Piping	9 Months
Motor Control Center, Instrumentation, Telemetering Controls and Recorders to accommodate new equipment	12 Months
Phase II * (Work is carried out Simultaneously)	
Rehabilitate Existing Plant B Clarifier	6 Months
Convert Existing for Greenleaf Filter Tank to Backwash Recovery Tank	6 Months
Phase III **	
A six million gallon treated water storage reservoir north of the All American Canal	6 Months
A satellite pump station along Bowker Road north of the All American Canal	6 Months

* Phase II is started after Phase I is completed.

** Phase III is planned to be constructed after Phase I and II are completed (aprox.2000).

2. HUMAN HEALTH AND ENVIRONMENTAL NEED

a. Human Health and Environmental Need

This project will provide a plentiful and dependable source of safe potable water for the growing population of the area. Currently the Water Treatment Plant has deficiencies that need to be addressed per the 1996 annual inspection conducted by the State Department of Health Services, Office of Drinking Water (Appendix B). One of the deficiencies quoted by the State is the need for all new filtration and disinfection facilities to be designed and built to achieve an average daily effluent turbidity goal of 0.2 NTU which is part of the performance criteria in the Cryptosporidium Action Plan. This Action Plan was taken into effect as a result of a Cryptosporidiosis outbreaks.

In 1993, the City of Milwaukee, Wis., had an outbreak which killed 100 people. In 1994, 302 cases were reported to the New York State Department of Health. As a result of these cases, the State of New York added Cryptosporidiosis to the list of reportable diseases in February 1994. As you can see, the need to correct this deficiency is of great need to the community.

The project will address the outlined deficiencies with improvements made as part of the Water Treatment Plant (Phase I), the expansion of the 24" waterline (Phase II) and the additional reservoir (Phase III). Phase I improvements will enable the Water Treatment Plant to achieve and maintain compliance with the State. Phases II and III will provide additional fire flows for the existing and future residents as well as industrial and commercial developments.

Water is readily available from the Imperial Irrigation District since 1946. The water comes from the All American Canal is shared by other parties in the Imperial Valley. The City receives a per capita supply is 58,376 gallons/yr. The City will not be required, by the Imperial Irrigation District, to obtain any water rights or any transfer of water rights. The Imperial Irrigation District has stated in their letter of March 30, 1992 (Appendix D) that they will provide water to the City of Calexico for any reasonable and beneficial uses. They also state that the City is utilizing the water for domestic use and this is considered reasonable and beneficial use. This project will not impact other users since the water being delivered to the City will not increase.

b. Environmental Assessment

Environmental information form for public projects was prepared by Public Works Department and submitted to Planning Department for review in accordance with City of Calexico adopted guidelines to implement CEQA.

Calexico Planning Commission, designated lead agency for CEQA review, conducted an Initial Study Hearing on May 15, 1997. Based on information provided in the staff report, and testimony by City staff, Planning Commission determined that the carrying out of the Water Treatment Improvement Project Phases 1, 2 and 3 presented no significant impacts to the environment and approved the preparation of a Draft Negative Declaration

Notice of Draft Negative Declaration was forwarded to all affected agencies and the State Clearinghouse in accordance with CEQA regulatory requirements.

One response letter was received from Caltrans during the mandatory 45 days review period. On June 23, 1997, Planning Commission conducted a public hearing and approved a Final Negative Declaration for the Water Treatment Improvement Project. Approval of Final Negative Declaration by Planning Commission was conditioned with the requirement that feasibility study and project management report under preparation for same project by Kennedy/Jenks Engineering group, would be incorporated into environmental documentation.

City Council at their regular meeting of August 5, 1997, certified the Final Negative Declaration and directed that "Notice of Determination" be filed with the County Clerk. Notice of Final Negative Declaration was filed with County Clerk on August 28, 1997.

Prior to initiating any environmental process or design of the improvements, several alternatives were discussed by the Public Works and Water Departments. Due to the deficiencies at the plant and the increasing commercial and industrial developments, it was decided that the proposed improvements were the only viable solution to addressing the City□s needs. The project is consistent with City□s General Plan. The environmental Impact Report for the current General Plan includes an evaluation of the effects of the expansion of the Water and Wastewater Facilities serving the City of Calexico. A copy of the City General Plan and the Water/Wastewater Facilities Master Plan accompanies this application as part of Appendix A and the Environmental Documentation in Appendix B.

On December 23, 1997, a Finding of No Significant Impact (FONSI) was published for public review by the EPA Region 9. EPA has determined that the three phases of the project, as designed and operated, should have no significant environmental impacts and thus be eligible to receive BEIF grants administered by the NADBank under a cooperative agreement with EPA. Although the applicant is seeking NADB funds for phase I & II only. Phase III will be financed by a SRF.

The project will not involve any negative transboundary environmental impacts and may contribute to a reduction of potential health risks associated with an insecure water supply, especially for the 80,000 people/day visiting Calexico from Mexico.

Environmental Action Required

a) Imperial Irrigation District (IID) - Require encroachment permit to install the water line on IID right-of way.

b) Environmental Health Services/County Courthouse- Review and comment on any possible environmental impacts.

c) Office of Historic Preservation - Review for compliance with National Historic Preservation Act.

d) State Department of Health Services, Office of Drinking Water - Review and comment on any possible impacts on the current water system or the environment.

Required Authorizations

a) Imperial Irrigation District - Encroachment Permit

b) State Historic Preservation: Received comments from the State Historic Preservation Officer stating no historic properties exist in the project area.

Documents submitted to regulatory agencies to the BECC

Copies of documents submitted to the various agencies to initiate the Planning and Environmental review of the project are included as part of Appendix B.

Environmental issues not already addressed in i - iii. That may be affected by project development

In 1993, the City of Calexico incorporated Kloke Tract and C.N. Perry Rd., areas recognized by the State Department of Housing and Community Development (HCD) as Colonias. Colonia areas receive 100% of their potable water from water lines installed by the City and serviced by the City Water Treatment Plant Facility. These two Colonias are without a sewage collection system. Approximately one-third of the residences within the Kloke Colonia utilize "outhouses", while the remaining homes in the Kloke and all homes within the C.N. Perry Colonia rely on septic systems. The City is currently in the design stages for construction of Wastewater collection services for these areas with grant funds received from a Community Development Block Grant (CDBG).

No health problems have been reported to the City by the County Department of Health Services in relation to the Water Treatment Facility or the lack of a wastewater collection system within the Colonias.

All other environmental issues have been identified and considered in terms i-iii

Environmental baseline studies and other environmental or health reports

Environmental information documentation is provided with this application. The General Plan EIR and the Water/Wastewater Sphere of Influence Facilities Plan are part of Appendix A.

c. Conformance with Local and Regional Conservation and Development Plans

i. Applicable local and regional plans and regulations

City General Plan

City Planning Director

608 Heber Avenue, Calexico, CA 92231

Tel: (760) 768-2180 Fax: (760) 357-5864

3. TECHNICAL FEASIBILITY

a. PROJECT SPECIFICATIONS

1) Appropriate Technology: This Water Supply Project consists of major improvements to the water system. The largest part of the project is the expansion of the treatment capacity of the filtration facilities presently operated by the City. Also, a major distribution line will be constructed on the east side of the service area. At that location, a pump station and ground level storage reservoir will be provided. These latter improvements will enable the operators to equalize pressures at remote locations in the distribution systems.

The overall purpose of the Project is to correct the deficiencies outlined by the State Department of Health Services and provide the community with a "stronger" distribution system.

Technology employed in this project will be identical to that which has been in use by the City for many years. Present staff is totally familiar with the operation and control of the treatment methodology. No new technology will be employed.

1. **Growth: Population growth is predicated on City Planning Department estimates, regional planning estimates, and data from the Southern California Association of Governments (SCAG). It is anticipated that the population of the service area will reach 30,000 persons by the year 2000. This will require an average day flow of 6 million gallons per day (mgd). Long term growth for the year 2015 is predicted to be 4,500 persons. This will require an average day flow of 8 mgd.**

Table 3-1

Projected Annual Growth

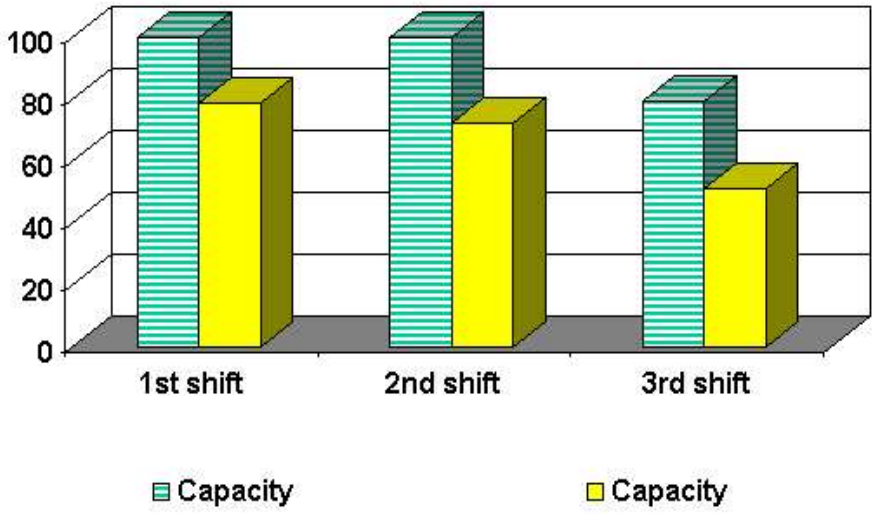
3) Average and Peak Flows: Past experience has indicated that the peak day flow is approximately 180% of the average day flow. This means that the short term peak day flow will be 10 mgd, while the long term peak day flow will be 14 mgd.

Due to the current volume of storage capacity available at the filtration plant site, a single peak day will not constitute an emergency in the delivery capability. By drawing on the filtered water storage, the City would be able to sustain a series of three or four days of flows in excess of the theoretical peak demand.

Average Peak day flows during the summer months are of approximately 8.07 MGD. Average peak flows during the winter months are approximately 2.9 MGD. Highest Peak Flow for summer months is 8.5 MGD. Highest Peak Flow for winter Months is 4.3 MGD.

Table 3-2

Water Demand vs. Plant Treatment Capacity



4) Production: Production is carried out on a twenty-four hour basis. Storage of filtered water is utilized to accommodate peak flows demands.

Table 3-3

Water Demand per User Type

It is proposed that the improvements to be made will increase the current treatment capacity of 10 MGD to a capacity of 16 MGD. An ultimate capacity of 20 mgd is visualized

5) Water Quality: Source water quality is excellent for a surface supply. Turbidity ranges from 40 units down to 5 units. Water is drawn from the All American Canal into a 25 million gallon raw water reservoir which is approximately one mile north of the filtration facilities. This canal is part of a County-wide irrigation system operated by the Imperial Irrigation District (IID).

6) Conservation: Calexico is a member of the California Urban Water Conservation Council. This is a statewide organization which has established a statewide water conservation program.

7) Pollution Prevention: City practices are in full compliance with State Health and Water Quality regulations.

8) Well Head: Not applicable.

9) Piping Infrastructure: A major thirty-six inch diameter concrete lined and coated steel pipe delivers water from the source at the All American Canal to the treatment facility. The distribution system is made up of P.V.C., asbestos cement, and cast iron piping ranging from thirty to four inches in diameter.

Asbestos cement pipe was installed approximately 50 years ago and is considered to be stable. The pipe is not representing a human health risk. Since the City□s water is delivered from the Colorado River and the content is very high on Total Dissolved Solvents (TDS) the asbestos cement pipe will not dissolve into the water. The City of Calexico has a monitoring program by which samples are collected from various locations within the City. These samples are taken on a weekly basis and are tested by an independent laboratory approved by the State Health Department.

10) Type of Treatment: Conventional Treatment. Coagulation, flocculation, sedimentation, high rate filtration, and disinfection method is used. Efficiency is such as to meet all required standards.

11) Project Cost: Total of Project design and construction cost is estimated at $11,330,000.00. See Table 1-1 for cost breakdown of design and construction of this project.

12) O&M Cost: Operational cost of the water utility is estimated to be $870,000 per year. Maintenance cost is estimated to be $ 1,000,000 per year.

13) Treatment Facilities: The Calexico□s Water Treatment Plant□s present capacity is 10 mgd. It is proposed that the improvements to be made will give a capacity of 16 mgd. An ultimate capacity of 20 mgd is visualized. In order to increase the capacity of the Water Treatment Plant to 16 mgd, the necessary treatment components of the Project are:

1. **Rehab existing Plant B clarifier**

2. **Construct new 80 foot diameter clarifier**

3. **Construct new filters with 12 mgd capacity**

4. Convert existing greenleaf filter tank to backwash recovery tank

5. Chemical addition equipment and piping

6. New distribution pump

7. Associated pumps, valves, and piping

8. Motor control center, instrumentation, telemetering controls and recorders to accommodate new equipment.

The Final Preliminary Design Report and Plans and Specifications (Appendix C) for Phase I of this project have been completed. The City is ready to request bids for project immediately after construction funding become available.

14) Distribution Improvements: A major 24-inch diameter distribution line will be constructed to the East Side of the City. A 6.0 million-gallon steel storage reservoir will be provided at the terminus of the 24-inch main. Pumping facilities will be constructed to pressurize withdrawals from the reservoir with chlorination system for dis-infection.

15) Wastewater Treatment: Not applicable

16) Municipal Solid Waste: Not applicable

b) TECHNICAL PROCESS

The technology utilized for the Project is well recognized in the field. It is an expansion of treatment technology that has been utilized in the City and elsewhere for many years. No new features or treatment processes will be included. The improvements to the distribution system are, likewise, based on well recognized and accepted technology.

This Project is wholly technical in nature. It is proposed to carry out the work by following planning and construction procedures established by the City over the past years. Each phase will start with the issuance of a Request for Proposal (RFP). This document will be circulated among design engineering firms that had previously expressed an interest in working in the area. City Staff will carry out construction management with the assistance of the Design Engineer.

c. QUALITY CONTROL PROGRAM AND O&M PROGRAM

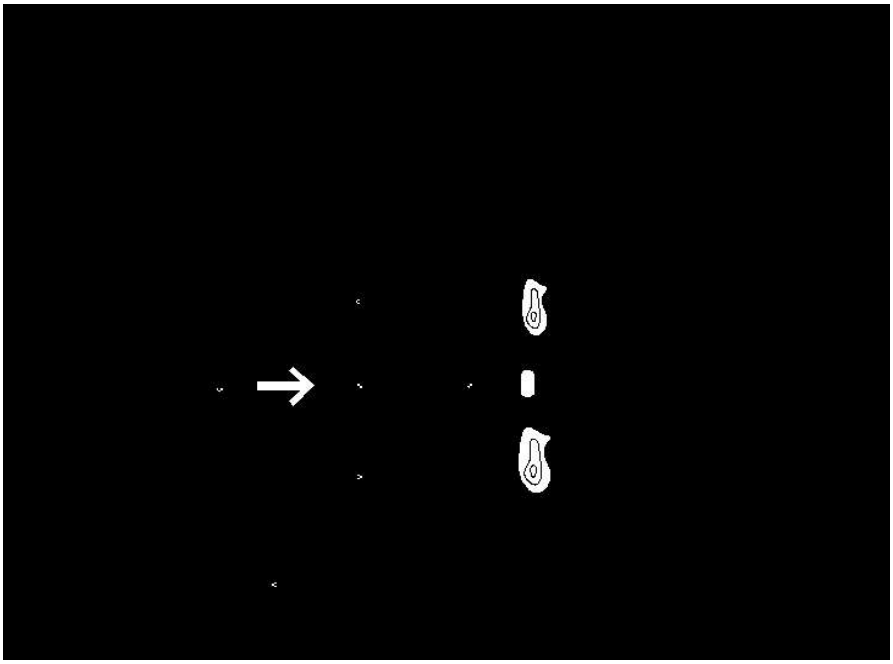
Quality Control of the engineering studies and design will be carried out by means of frequent consultation between City Staff, the Project Inspector and the Design Engineer. The Project Inspector will maintain detailed daily inspection records throughout the duration of the project. The City has established engineering standards over the years. Design will conform to these standards. The City also has operation and maintenance manuals that will continue to serve the proposed infrastructure. The City have operation and maintenance manuals that will continue to serve the proposed infrastructure. Present staff is totally familiar with the operation and control of the treatment methodology. No new technology will be employed.

4. FINANCIAL FEASIBILITY AND PROJECT MANAGEMENT

The long term feasibility of this project will be secured by the subsidized construction of water service capacity serving both existing customers and needs of future development within the City□s sphere of influence service area. Both at present and in the financial feasibility projections over the next 25 years, the utility customers will provide full funding

for utility operations and ongoing capital replacement expenditures. Nonetheless, even with the competent operations of the existing water treatment plant and distribution system, current facility deficiencies and inadequate service peak capacities require correction and expansion through capital funding that the existing community economy cannot provide without the Border Environment Infrastructure Fund (BEIF) grant assistance.

Table 4-1



Total Project Cost Breakdown

a. Financial Feasibility

As shown in table 4.2, financial feasibility for the project requires significant amount of grants. The North American Development Bank (NADB) along with the Border Environment Cooperation Commission (BECC) developed the financial structure for the project. In such structure, the NADB defined the grant amount needed from the Border Environment Infrastructure Fund (BEIF). The BEIF is composed of construction grant and transition funds, the allocation of construction grants for this project was defined in $3,000,000.00 and $3,477,320.00 for transition funds. Additionally, the City of Calexico has requested PDAP $190,000.00 funds for the Phase II and III final design. Approval of those funds is likely to occur when the project is certified by the BECC.

1) Financial Statements - Historical

As part of the assistance provided by the BECC through the PDAP technical assistance program, Kennedy Jenks, Inc. for the City of Calexico analyzed the financial statements for the past 5 years. As described in the report prepared by KJ, in FY Ending 1995-96 the Fund equity was approximately $3 million, with outstanding COPs of $5.8 million on undepreciated assets of $14.2 million. In FY 1995-96 the total charges for services were $2.3 million from 4,731 water customer accounts; there was a net increase in Fund cash of $434,329.

The City is audited annually by an independent auditor. The City□s General Fund is maintained on a modified accrual basis in conformance with the principles affirmed by the Government Accounting Standards Board. For all years shown, the Independent Auditor□s Report found that the City□s general and water enterprise fund statements

present fairly the financial position of the City of Calexico in conformance with generally accepted accounting principles.

2) Financial Statements - Pro Forma

The projection of the water fund sources and uses for the 25-year life of the project loan was analyzed. For FYs 1997-98 through 2003-04 an annualized Pro forma was prepared; thereafter a projection of FY 2014-15 and FY 2024-25 in constant values shows the impact of increasing service area customers.

The revenue sources and uses are shown in a modified income statement format, with adjustments for depreciation, developer-based (capital facilities fee) revenues and capital expenditures incorporated instead of retained earnings. Non-operating revenues include grants, as well as the interest and principal portions of existing debt service expenditures. The annual revenue streams from the project, net of the costs of effective operations and maintenance, are significantly above the 1.2 ratio for the water utility□s annual debt service requirements for all projected years.

3) Financial Structure of the Project and NADB Analysis

The project consists of water treatment plant expenditures of $11.33 million divided into three phases through FY 2003-04, plus annual facilities replacement projects of $190,000. Moreover, grant funding of $1.2 million (net of City matching funds of $300,000), have been applied for from the Economic Development Agency.

On the other hand, the project is currently on the State of California Revolving Fund Priority List, but funding from that source has not been approved. The local share of project financing is from utility user fees. These revenues will be derived from an increase in water rates billed to customers, and from the projected increase in customers through population increases and scheduled annexation of the City□s service area. Table 4.2 shows the financial structure of the project.

Table 4-2

Project Financial Structure

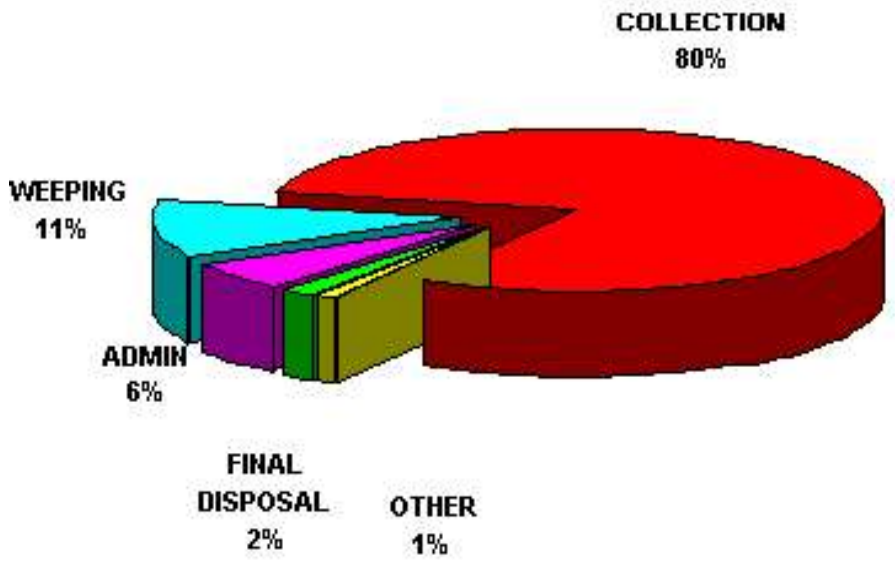
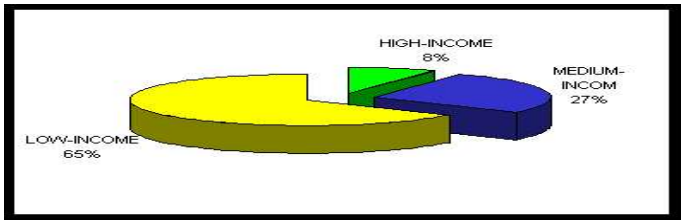


Table 4-3

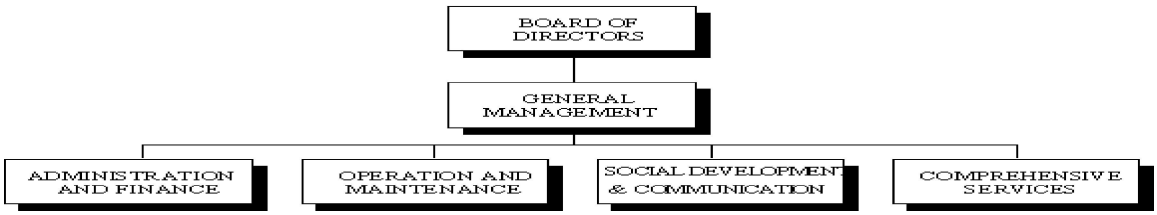


Composition of BEIF defined by the NADB

As the Table 4.3 shows, the BEIF money is divided in construction grant and transition funds. The construction grant is going directly to cover portions of phase I of the project. The transition funds are provided to the project sponsor to alleviate the coverage of the debt service during the period necessary by the City of Calexico to raise the water rates. This means that such transition funds will cover part of the interest costs and payment of principal for the first six years after initiating the project. A period of six years has been defined as needed by the City of Calexico to adequate their rate to a level to support the project expenses.

The NADB analysis provided the disbursement calendar for the transition funds as shown in Table 4.4. This definition is based on cash flow projections, the final numbers may vary according to real figures on operating revenues and O&M costs.

Table 4-4



Disbursement of BEIF funds

4) Capital Improvement Plan/Budget

Table 4.1 itemizes the capital project expenditures. The projected expenditures are for the three phases of the project. All expenditures are for fixed assets that will be capitalized to the water utility fixed asset inventory.

The FY 1996-97 Capital Improvement budget includes capital replacement, additional expenditures associated with the upkeep of Phase I, II and III facilities, the existing water mains and a 1 and a 3 mgd treated water storage tank. The existing treated water storage tanks were built in the 1940s, and are projected to be replaced within the next seven years at an approximate cost of $1.5 million. Similarly, approximately 15 percent of the water mains are more than 60 years old as of 1997; these and additional pipelines will be in need of replacement in the next 25 years. Moreover, these long-term capital expenditures are estimated based on the available fund reserve levels at the projected utility service rate-based revenues.

5) Operations and Maintenance Budget - Historical

A five year summary of the FY 1991-92 through FY 1995-96 O&M actual utility expenditures is included in the report described previously. Moreover, the FY 1996-97 approved budget summarized for comparison with the expenditures of the prior five year actual expenditures. These summaries are based upon the City□s audited financial documents.

The water system has two primary sources of revenue. Monthly service charges pay for operations (including capital replacement and improvements) and repayment of debt. The second source of revenue is from connection fees collected at the time building permits are issued. This fee is used to augment other revenue sources for expansion-related costs, including capital expenditures and expansion-related debt repayment.

6) Operations and Maintenance Budget - Pro Forma

The pro forma projections are based on the FY 1996-97 budget, and incorporate the projected increases in water demands over the next 25 years, with utility administration and billing service cost increases are a function of the number of utility customers. The expenditure level is based on the FY 1996-97 budget for capital replacements.

7) Sensitivity Analysis

Sensitive variables, which may impact the financial viability of the project, include increases in project costs, rate of population growth, and reduced grant funding. The impacts of varying these elements is shown as the additional FY 1997-98 rate-based revenues from utility customers required in order to cover the changed variable. Under the nominal projected pro forma revenue requirement projection, annual rate adjustments are required of 10 percent and 2 percent for FY 1997-98 and FY 1999-00.

Other variables analyzed by the BECC and NADB include different loan interest rates and a 10 and 20 year payment period. As shown in the sensitivity analysis, a reduction in the level of grants, or an increase on project costs, could double to triple the nominal rate increase required from City residents in FY 1997-98.

8) Financial Break-Even Analysis

The City of Calexico Water Utility enterprise is self-supporting non-profit municipal service. The rate structure as recommended by the NADB and BECC, lists the utility rate-based revenues required to recover total costs, including O&M costs, capital-related expenditures, and funding of appropriate reserve levels. All revenues are based on the recovery of costs while maintaining minimally adequate reserves during the projection period through FY 2003-04.

9) Demographic and Economic Information of the Proposed Service Area

Demographic and economic information for the City of Calexico and the County of Imperial is shown in Appendixes A, B, and F. The City□s historical and current population is shown in the previously described Table 3.1; projected population and utility demands are shown in Table 3.2.

The City of Calexico is included in the Imperial County labor market area. The largest industry within the County is agriculture. The unemployment rate based on August 1997 data was 32 percent. Unemployment within the City was 41 percent, based on a civilian labor force of 9,940. Because of the high unemployment and large pool of unskilled labor, Calexico has become a prime target area for manufacturing and assembly plants. Several sites within the City limits are zoned for light industry, including a 66-acre industrial park being developed by the Calexico Community Action Council, Inc. There are 410 acres in the City limits zoned for light industry; about 40 percent is vacant with parcels ranging in size from 1 to 10 acres. An additional 168 acres within the City□s sphere of influence also is zoned for light industry.

Property taxes in California are limited to 1 percent of the full cash value, except for taxes to pay debt service on indebtedness approved by voters prior to 1 July 1978 and on debt service on bonded indebtedness for the acquisition or improvement of real property approved on or after 1 July 1978 by a two-thirds vote of the people. Yearly taxable value increases following the base year are limited to the growth in the customer price index, but may not exceed 2 percent annually. For assessment and collection purposes, property is classified either as "secured" or "unsecured," and is listed accordingly. The "secured roll" is that part of the assessment roll containing State assessed property and property on which a lien is sufficient for the County Assessor to secure payment of the taxes. Other property is assessed on the "unsecured roll."

The Imperial County Tax Collector collects secured tax levies for each fiscal year representing taxes levied for each fiscal year on taxable real and personal property which is situated in the County as of the proceeding April 1. Unsecured taxes are assessed and payable on April 1 and become delinquent on 31 August, in the next fiscal year. One-half of the secured tax levy is due April 1 and November 1, and become delinquent April 10 and December 10, respectively. A 10 percent penalty is added to any late installment. On June 30, delinquent properties are sold to the state. Property owners may redeem the property upon payment of delinquent taxes and penalties. If no payments are made at the end of five fiscal years the property is deeded to the state. Such properties may be thereafter conveyed to the County Tax Collector as provided by law. The City□s net combined total debt is 2.34 percent of adjusted assessed valuation.

b. Fee/Rate Model

Analysis was carried out by the NADB and the BECC including an evaluation of the current rate-based revenues from the City□s utility customers by user classes and water demands. The population projection is based on the Local Agency Formation Commission-(LAFCO) defined sphere of influence (service area) for the utility and the Southern California Area Governments- (SCAG) based population projection for the City. The projected customer base is defined as equivalent dwelling units.

After completion of the BEIF analysis by the NADB, the recommended rate increases were defined in order to support the proposed project. The Table 4.5 shows the current monthly fixed rate for a residential customer of $21.40. This fixed rate corresponds to a 3,000 cu ft (85 m^3/month) consumption per residential user per month.

As previously mentioned, the current monthly fixed rate for a residential customer of $21.40, during FY 1998-99 this value is projected to increase to $23.33. During FY 1999-00 is projected to increase to $25.26. As shown in Table 4.5, the monthly residential fixed rate is necessary to be increase in $1.93 dollars per year.

This rate increase is based on a conservative approach considering the minimum water consumption range to be charged to the residential users. It is also important to mention that BEIF funds are targeted to subsidize residential users only, and consequently will not subsidize commercial nor industrial customers.

Table 4-5

Composition of BEIF defined by the NADB

The Calexico City Council is authorized to adopt utility rate adjustments by resolution after public notification and hearings at Council Meetings. The last rate adjustment was completed by City Resolution 88-41 on 20 October 1988, whereby a series of rate increases over the following five years were enacted. By City Resolution No. 97-35 adopted May 6, 1997 the Calexico City Council authorized the filing of this grant funding application to BECC for Project Phase I, II and III certification. The Council has been appraised of the financial impact of the water treatment plant project, and is prepared to establish economically viable user fee adjustments.

c. Project Management

1) Organizational Structure

The organization chart of the City of Calexico depicts the positions of key management and functional department heads, and the lines of authority among the positions. The positions include the Director of Public Works, the Finance Director, the Water Department Supervisor, and City engineering functions. The job functions, lines of communication and responsibilities including management of construction projects of all personnel have been provided to the BECC. Of particular importance is the significant experience these individuals have with the City of Calexico, with an average of 28 years each. This continuity of staffing will provide additional efficiencies during the critical program implementation phase of the project. Below is a brief description of the three major management team leading the water utility.

Director of Public Works - Mr. Mariano (Mart) Martinez

Function, Responsibility, Line of Communication, Requirements:

- **Reports to the City Manager and performs those duties in the City Managers absence.**
- **Plans, organizes, directs and coordinates all City public works functions, including water, wastewater, storm drains, sanitation and solid waste, street maintenance, parks, and airport maintenance.**
- **Evaluates and develops plans and schedules for public works projects**
- **Responsible for all public works personnel functions**
- **Supervises water and wastewater treatment plant and distribution system managers**
- **Prepares and monitors budget estimates and work programs**
- **Works with the Finance Director on financial and related activities**
- **Assists with special projects and programs**
- **Directs the identification, selection, application and administration of state and federal grant and loan program**

Experience and Qualifications of Mr. Martinez:

Degrees and Coursework

Imperial Valley College - Water/Wastewater Technology; California State University, Sacramento- Water/Wastewater Technology Courses; Michigan State Univ. - Wastewater Technology Courses

Licenses

Wastewater Treatment Operator Grade 3

Water Treatment Operator Grade 4

City Finance Director - Ms. Judith Hashem

Function, Responsibility, Line of Communication, Requirements:

- **Reports to the City Manager.**
- **Supervises the assistant finance director, accountant, computer operator, customer accounts clerk and finance secretary**
- **Plans, organize and direct the City financial, accounting and related activities**
- **Prepare the annual City budget, and ensure that budget appropriations are not exceeded**

• Audits and approves before payment the legality and correctness of all charges against the City with advice of the City Attorney

- **Collects all utility charges, taxes and fees for whose collection the City is responsible**
- **Supervises the keeping of current inventories of all City property**
- **Knowledgeable in the principles and objectives of local government accounting, budget preparation, financial controls and computerized financial systems**
- **Requires an accredited college degree with major coursework in accounting and five years in a responsible position in municipal government**

Experience and Qualifications of Ms. Hashem:

Degrees and Coursework

University of California at San Diego - Bachelor of Science in Business Administration

Water Department Supervisor - Mr. Victor Rodriguez

Function, Responsibility, Line of Communication, Requirements:

- **Under the general supervision of the Public Works Director**
- **Supervisor of the WTP operators and water distribution system foremen**
- **Plans, coordinates and directs the operation and maintenance of the WTP plant**
- **Responsible for maintenance and construction of main and secondary water distribution lines and booster pump and wastewater collection sewers and lift stations**

- **Prepares work schedules and job estimates including manpower, materials, equipment and schedules**

- **Enforces compliance with all water quality standards and worker safety regulations Assists in preparing department budgets**

- **Knowledge of the principles and processes of water treatment systems, familiarity with the principles of testing and treatment of water, knowledge of the procedures, equipment and materials used in water treatment**

- **Ability to prepare budgets and estimates, supervise others, and to maintain effective relationships with crews, agencies and the public**

Experience and Qualifications of Mr. Rodriguez:

Degrees and Coursework

Imperial Valley College - Associate in Science in Water/Wastewater Technology, and Supervisory Management; University of Southern California, Los Angeles - Backflow prevention Assembly; California Water Pollution Control Association - Anaerobic Sludge Digestion, Chlorine Safety

Current and Previous Licenses

Water Analysis WL-5

Water Treatment Operator Grades 2-4

Backflow Prevention Certification No. 2602

2) Institutional Capacity and Legal Framework

The City of Calexico was incorporated in the State of California General as a General Law city. California general law city communities not otherwise served by public utilities have the authority to provide services, including but not limited to water and wastewater utilities. The City□s sphere of influence for long-term water utility services, as identified in the Facilities Plan, is within the Local Area Formation Commission (LAFCO) sphere of influence for the City. This area was specified in LAFCO resolution CX 1-96 dated 27 March 1997. As such, the City has the authority to provide utility service needs for the projected area. As shown in the Opinion Letter from the City Attorney included in the Appendix D, the City of Calexico has the legal authority to enter into agreements for the use of public easements and rights of way, and will obtain permits to construct, operate and maintain the proposed water lines.

The water utility service needs are based upon projected service area population and water demands. The official Southern California Area Government (SCAG) population projections, which are based upon the sphere of influence, are utilized in the revenue projections of this application. Therefore, both the legal authority for utility service delivery, and the projected water usage and revenues derived from that usage, are supported by regional planning commissions.

As previously described, the City Council is authorized to adopt water utility rate adjustments by resolution. The City□s authority to impose rates, fees and charges on persons using the water service is not subject to review or approval by any other agency, including the Public Utilities Commission of the State of California. By City Resolution No. 97-35 adopted May 6, 1997 the Calexico City Council authorized the filing of this grant funding application to BECC for Project Phase I, II and III certification.

The City of Calexico Water Treatment Plant operates under California System No. 1310002, which was first issued on April 20, 1949. The California Department of Health Services Drinking Water Field Operations on January 16, 1997 last inspected it.

The State of California Governor□s Office of Planning and Research Clearinghouse, by letter The City□s water enterprise fund is self-supporting from fees and charges, and does not receive tax-based revenues. However, there are certain State constitutional and statutory limitations on taxes and expenditures, which may affect certain utility revenue sources availability. On June 6, 1978 California voters approved an amendment which added Article XIII A to the California Constitution. Article XIII A affects the valuation of real property for the purpose of taxation. Proposition 62 was adopted by California voters on November 4, 1986 which requires that any special tax imposed by a local government entity be approved by a two-thirds vote. Proposition 218 was adopted by California voters on November 5, 1996 which added Article XIII C and D to the California Constitution. These impose certain limitations and voter requirements on new or increased taxes, assessments and property-related fees and charges. The City□s water enterprise fund is self supporting from fees and charges, some or all of which may ultimately be determined to be "property related." As such, these provisions could adversely affect the financial condition of the fund. However, the courts will ultimately determine the interpretation and application of Proposition 218, and it is not possible at this time to predict the outcome of such determination.

5. COMMUNITY PARTICIPATION

a. COMPREHENSIVE COMMUNITY PARTICIPATION PLAN

1. Local Steering Committee

A Steering Committee was appointed by City Council at their regular meeting of May 6, 1997. The Steering Committee is made up of the following five community members:

Ruben Martinez Director for Calexico Community Action Council

Javier Diaz Architect with the firm of Coup & Smith Architects

Chavela Aguilar San Diego State University

Linda Barrientos Local Business owner - Linda Real Estate

Gilbert Grijalva Calexico Housing Authority

The Steering Committee met on June 9, 1997. The Steering was informed of the Certification Criteria for BECC, discussed the impacts the project would have on the City, set the public hearings and established the 30-day period to inform the community of the project. These public hearings were held on July 14, 1997 and July 17, 1997. Public hearings were published in the local newspapers and affidavits of publication and minutes of these hearings are in Appendix E. The committee, as part of the community outreach will meet with various community organizations to inform them of the project.

2. Meetings with Local Organizations

The project was subject to several hearings before the Planning Commission and will require a number of City Council approvals. The Steering Committee and City Staff has made presentations to local businesses through the Chamber of Commerce Community members have been reached and general public comments have been received during presentations made to Calexico Neighborhood House Group and Calexico Community Action Council.

City of Calexico Staff and members of the steering committee held two meetings with local organizations. The local business were reached through the Camber of Commerce and the Community has been notified through the advertisements of the public meetings in the

local newspapers and by a meeting held with the Calexico Neighborhood House Group. The Chamber members showed interest and support for the project. Chamber issued a letter of support for the project. The second meeting was with the Neighborhood house community members. This group meets on a weekly basis to inform the citizens of community happenings. The meeting with this group generated several questions regarding the increase of water rates. The group seemed very supportive of the City□s need for this project. The Neighborhood House also issued a letter in support for the project.

Additionally, during a Workshop organized by the BECC in El Centro, CA., City of Calexico staff met with CESPM, Mexicali, BC (Comisión Estatal de Servicios Públicos de Mexicali). In such meeting the water treatment plant upgrade and expansion project was presented.

3. Public Access to Project Information

Information regarding the project was made available to the public 30 days prior to the first public hearing held by the Steering Committee for the project. Copies of project information were available at the public library, office of the City Clerk and the department of public works office. This notice to the public informing them of the public hearing and availability of documentation was published in the local newspaper.

4. Public Meetings

Public Hearings were held by the Steering Committee on July 14, 1997, July 17, 1997 and May 5, 1998. Meetings were held at 5:30 p.m. at the Calexico City Council Chambers. The Steering Committee discussed the project in detail. Mr. Mariano Martinez, Public Works Director, presented a description of the project. Question regarding the raising of the water rates was posed and the public was informed that those could be a possible increase but as of the date of the hearing, an exact amount or percentage was not given. The public was informed that the firm of Kennedy/Jenks Consultants to determine such increases was performing a Financial Feasibility Study.

The meeting on May 5, 1998 was advertised 30 days prior to the meeting to comply with the BECC criteria. The advertisement also announced locations where information on the project could be obtained, the date, time and location for the meeting and a table with the suggested water rates. Project information was available for public review at:

- **City of Calexico offices**
- **Calexico Public Library**
- **Calexico Neighborhood House**
- **Chamber of Commerce**
- **Calexico Community Center**
- **Casa Imperial Apartments**
- **Calexico Water Finance Department**
- **Office of the City Clerk**
- **Camarena Memorial Library**
- **BECC office**

Mariano Martinez gave a detailed presentation of the project, including the proposed user fee increases required to support the project. Those attending the meeting received project summaries that included tables depicting the financial structure of the project and the BEIF grant money defined by the NADB.

b. REPORT TO BECC

As part of the City□s report to the BECC, the City of Calexico submitted a full report on the Public Participation activities. Such report included minutes and Affidavits of Publication on meetings held by City Planning Commission and Steering Committee, minutes of meetings held by City Council and meetings held by the Steering Committee with the various community organizations. Additionally, the City Council is in the process to approve a resolution that will have in place the water rate increases.

6. SUSTAINABLE DEVELOPMENT

a. Definition and Principles

The long-term needs of the community in and around the City of Calexico have been comprehensively identified through the development of water facility plans based on the long-term population growth and water demands for the residents within the Calexico sphere of influence as defined by regional planning authorities. The project will improve the quality of life in the community by assuring healthy and abundant potable water supplies adequate for residential needs, community parks and recreation, and the expanding industrial and commercial uses of water. In doing so, the historically high unemployment rates in the community can be reduced through the creation of additional employment opportunities, thus enhancing the quality of life through jobs creation.

Adequate potable water meeting state and federal regulatory health standards are achieved through the construction of improved water treatment facilities to be part of the proposed project. As the sizing of the project is based on the build-out needs of the greater community, it not only meets the needs of the current population, but also the needs of the anticipated population through the year 2025. However, this utility services project is not designed to increase growth, but to serve the growth projected as a result of the increased population.

The community growth projected by the regional planning authorities is in anticipation of increased economic activities on the California side of this border community, as well as the population pressures from the very high population growth in Mexicali, on the Baja California side. The project will ensure a stable and safe water supply for current and future residents of the City of Calexico to the year 2015, and provide a foundation for commercial and industrial development within the City. The updated and expanded water treatment plant will also supply water to nearby colonias, for which a separate wastewater collection project is under development. Filter backwashing technology proposed for the project includes recycling of 750,000 GD of effluent, increased removal of solids and reductions in discharges to the New River. The water source for the City of Calexico is imported supplies from the Imperial Irrigation District (IID) through the All American Canal, which utilizes Colorado River water supplies. The IID is committed to supplying the City with reasonable and beneficial projected water demands.

The City of Calexico has conducted a series of public meetings and hearings at both regular City Council meetings and at local community group meeting. The community water needs, projected growth, proposed project and financial impacts of the project have been discussed, and public input on the project solicited. The majority of the public comments were that the community residents are not financially capable of supporting anything but minimal rate increases for utility services until more job opportunities are created.

The Local Agency Formation Commission (LAFCO) has defined the City□s sphere of influence (service area) for the utility, and the Southern California Area Governments- (SCAG) based population projection for the City have been used for projecting water demands in the area. As such, the City□s coordination with appropriate institutions for balanced development planning and better use of scarce resources has been achieved.

b. Institutional and Human Capacity Building

The proposed water utility project is to be operated, maintained and expanded as required for the benefit of the community by the City of Calexico. Since the 1940□s the City, guided and managed by the City Council and operated by City staff, has provided utility service. In this sense, the Project Management, the City□s existing staff is qualified and experienced in operating the current water system, and in carrying out the capital improvement program required to expand the system to fulfill growth-induced water supply needs. Also demonstrated in Section 4-C is the City□s institutional capacity for operating and maintaining the project.

Immediate needs for additional staffing are not anticipated to be required, as staffing resources are adequate for the expanded plant needs. However, the long term utility human resource needs will be satisfied by both advancement of qualified existing personnel within the City as well as by hiring of specialists in treatment plant and public utility operations. Local training programs support the advancement of personnel, including those provided at the Imperial Valley College. Institutional and human capacity building within the City□s department of public works is performed through in-house staff training programs, including seminars/workshops sponsored by the State Department of Health Services and the California/Nevada/Arizona American Water Works Association. The City actively encourages technical training programs within regional educational institutions, including Imperial Valley College located in Imperial, California. In conclusion the City□s existing professional development program, existing staffing resources are adequate for addressing institutional and human health requirements. This finding is supported by the State DHS in their March 11, 1997 letter to the City.

For outside hiring needs, metropolitan communities with large skilled labor pools are nearby. These include Brawley, also located in Imperial County, the City of Yuma, located to the east in Arizona, and the City of San Diego, to the west.

As shown in table 3.1, population projections for th City□s service area will increase from the current 26,354 to 60,412 by the year 2025. Currently, residential water utility service demand is 89% of total services, the long-term projection of water demand implicitly presumes that the current demand mix among user classifications (residential versus non-residential) will not change and that future residential demand with remain at 89%. The need for residential infrastructure serving the employees of referred commercial and industrial activities will continue to be the main focus of the City□s water utility services, as projected maquiladoras service are not anticipated to be water-intensive industries.

c. Conformance with applicable Local and Regional Conservation and Development Plans

The City of Calexico has sought to conform with all local, regional, state and federal guidelines and regulations regarding the treatment and delivery of potable water supplies to the community it serves. As described in Section 4, the City has the authority to provide water utility services within the Local Area Formation Commission-defined sphere of influence. The City Attorney has opined that the City of Calexico has the legal authority to enter into agreements for the use of public easements and rights of way, and will obtain permits to construct, operate and maintain the proposed water lines. The City of Calexico Water Treatment Plant operates as California System No. 1310002, and is monitored for compliance with all regulations by the California Department of Health Services Drinking Water Field Operations. Finally, the State of California has acknowledged that the City of Calexico Treatment Plant Expansion project has complied with documentation pursuant to the California Environmental Quality Act environmental review, resulting in a negative declaration for the project. As such, the Calexico Public Works Department has indicated that an Environmental Impact Report is not required.

The long-term regional development plans for Calexico and the County of Imperial Valley include commercial and industrial developments. The City□s planning staff are working in concert with this planning agency to assure coordinated development. In those plans, housing codes and zoned density restrictions will direct growth in an orderly fashion to assure that adequate infrastructure and community services will be available to new residents and industry

The City□s existing Water Treatment Plant is located on land adequate for facility expansion. No changes in zoning or purchase of additional land will be needed to accommodate the proposed project. The proposed project conforms with the designations for the site per the Calexico General Plan and Zoning Ordinance. The right-of-way authorization for the main distribution system pipeline to Bowker Road are in the process of being acquired based on discussions with applicable county and City authorities. The application approval process of the right-of-way permits is underway and based on discussions between County and City regulatory authorities these permits are expected in 1998.

The City has sought to provide in the Application for each of the above-referenced documents or specified regulation, the document and the contact person, organization, address, telephone, fax, and E-mail, if applicable.

d. Natural Resource Conservation

The technological configuration of water treatment plant improvements includes the conversion of a current Greenleaf filter tank to a filter backwash recovery tank. This unit will capture the filter backwash effluent, allow settling of solids for removal to evaporation beds, and then approximately 750,000 GD will be recycled to the raw water supply. This represents a savings of 5% of the total raw-to-treated water volume used in the process. Also, discharges of backwash effluent to the New River will be vastly reduced, contributing to overall water quality and ecosystem improvement in this riverine system.

In 1993, by a motion of the City Council, the City of Calexico became a signatory of the California Urban Water Conservation Council Memorandum of Understanding Regarding Best Management Practices (BMPs) for water conservation. In becoming a signatory of the BMPs, the City is committed to enacting water conservation measures to eliminate wasteful water use practices and encourage water conservation. The proposed water system project utilizes high construction standards for minimizing distribution system losses, and the City is committed to staffing water distribution system maintenance specialists to minimize future system loses.

The City is currently coordinating with the California Urban Water Conservation Council (CUWCC) on the best water conservation program for the community. Due to lack of personnel and funding, the City has only been able to follow limited conservation methods through Building Codes and City Ordinance, Section No. 12.12.030. Washing vehicles on streets.

The City Code enforcement officers enforce these ordinances. The public is also made aware of this ordinance through letters sent to the homes advising them against water waste. (See attached).

The Building Department through the issuing of building permits also participates in a limited manner by requiring developers and construction companies to install low flush toilets, showerheads and faucets that comply with applicable Appliance Efficiency regulations.

The Water Treatment Plant will also implement water conservation as a result of the recycling of backwash water, i.e. nearly 750,000 gallons per day.

Even though the City of Calexico has not been able to implement a Water Conservation Program on a City-wide basis as soon as desired, minimal and less costly changes are being made. Barriers to the implementation of the more common programs within California include a significant transiential population, a high percentage of water utility customers living below the poverty line, and/or unemployment and bilingual communication problems. As such unique public education on water conservation is required.

Once a tailored conservation program has been developed and the Public Works conservation program specialist identified, the City is seeking to acquire technical assistance from the BECC through the Project Development Assistance Program (PDAP) to implement and promote the water conservation program.

e. Community Development

The City of Calexico currently has severe unemployment due in part to the seasonal nature of the agricultural economy predominating in the Imperial Valley. As such, the development of non-agriculturally based industry and commercial business in the City will create additional and long-term socioeconomic development in the area. This development is associated with the City's status as a major transportation corridor between Mexico and USA, and the expansion of light industry and commercial business employment opportunities.

Moreover, due to California State law prohibiting general City government use of net utility enterprise revenues, no economic benefit to general City services is projected from this enhancement of the community water services. As such, the essential benefit derived from this project is the continued availability of safe and affordable utility services adequate for the projected community growth.

ADDITIONAL INFORMATION

ADDITIONAL INFORMATION THAT YOU WOULD LIKE TO PROVIDE

The project will provide Water Treatment and Distribution Facilities adequate for the next seventeen years. At the present time, it is anticipated the capacity of facilities presently existing will be exceeded within the next five years. The contemplated project will provide for normal growth. However, Calexico is situated on the border opposite Mexicali. This area has been designated as a principal traffic corridor for future trade.

The Public Works Director certifies that all information provided in this application is current and correct to the best knowledge possible.

Signature Date