



Submitted: October 5, 2015

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Project:	The proposed project includes the construction of wastewater collection system (WWCS) infrastructure for the residents of the FM 511-802 Colonia ¹ ("Project area") in Brownsville, Texas, and the installation of yard-line connections from the home to the WWCS, as well as the decommissioning of existing on-site wastewater disposal systems for up to 465 homes(the "Project").
Project Objective:	The purpose of the Project is to provide access to and use of first-time wastewater services in unserved areas and eliminate exposure to untreated or inadequately treated wastewater discharges by connecting the homes to new wastewater collection infrastructure, contributing to the reduction of water pollution and the risk of waterborne diseases.
Expected Project Outcomes:	The environmental and human health outcomes anticipated for the Project include: <ul style="list-style-type: none"> • Provide access to wastewater collection and treatment services for 685 homes, of which up to 465 new residential connections will be installed through NADB-BEIF funding; • Eliminate untreated or inadequately treated wastewater discharges of approximately 0.21 million gallons a day (mgd).²
Population Benefitted:	2,630 residents at the FM-511-802 area of Brownsville TX. ³
Sponsor:	The local water utility, <i>Brownsville Public Utility Board</i> (BPUB).
Project Cost:	US\$29.74 million.

¹ The Office of the Secretary of State defines a "colonia" as a residential area along the Texas-Mexico border that may lack some of the most basic living necessities, such as potable water and sewer systems, electricity, paved roads, and safe and sanitary housing.

² Based on the final engineering report, anticipated flows have been calculated using 80 gallons per capita per day.

³ Based on 685 residential connections and an average household of 3.84 inhabitants per home as established in the Project's Facility Plan.

**Uses & Sources of
Funds:
(US\$)**

Project Component	Amount	%
Construction related to the WWCS*	\$26,113,511	87.8
Construction related to residential connections	2,235,000	7.5
Contingency	297,389	1.0
Supervision	356,866	1.2
Connection fees	738,885	2.5
TOTAL	\$29,741,651	100.0
Sources	Amount	%
TWDB – (grant)**	\$24,505,000	82.4
TWDB – (loan)	840,000	2.8
BPUB – (equity)	768,511	2.6
NADB-BEIF – (grant)	3,628,140	12.2
TOTAL	\$29,741,651	100.0

* Includes costs related to design, inspection, permits, surveying and testing.

** Texas Water Development Board (TWDB)

1. ELIGIBILITY

Project Type

The Project falls within the eligible sector of wastewater collection and treatment.

Project Location

The Project is located in the southeastern area of the City of Brownsville in Cameron County, Texas, approximately three miles north of the U.S.-Mexico border. The Project is within the border region defined as 100 kilometers (62.5 miles) of the U.S.-Mexico International border.

Project Sponsor and Legal Authority

The public-sector Project sponsor is the *Brownsville Public Utility Board* (“BPUB” or the “Utility”). Pursuant to the Texas Administrative Code, Title 30, Part 1, Chapter 291, BPUB has legal authority through the Certificate of Convenience and Necessity (CCN) 10549 and 20217 to develop, operate and maintain water and wastewater system infrastructure within the City of Brownsville and in certain areas of Cameron County outside of the city limits.

2. CERTIFICATION CRITERIA

2.1. TECHNICAL CRITERIA

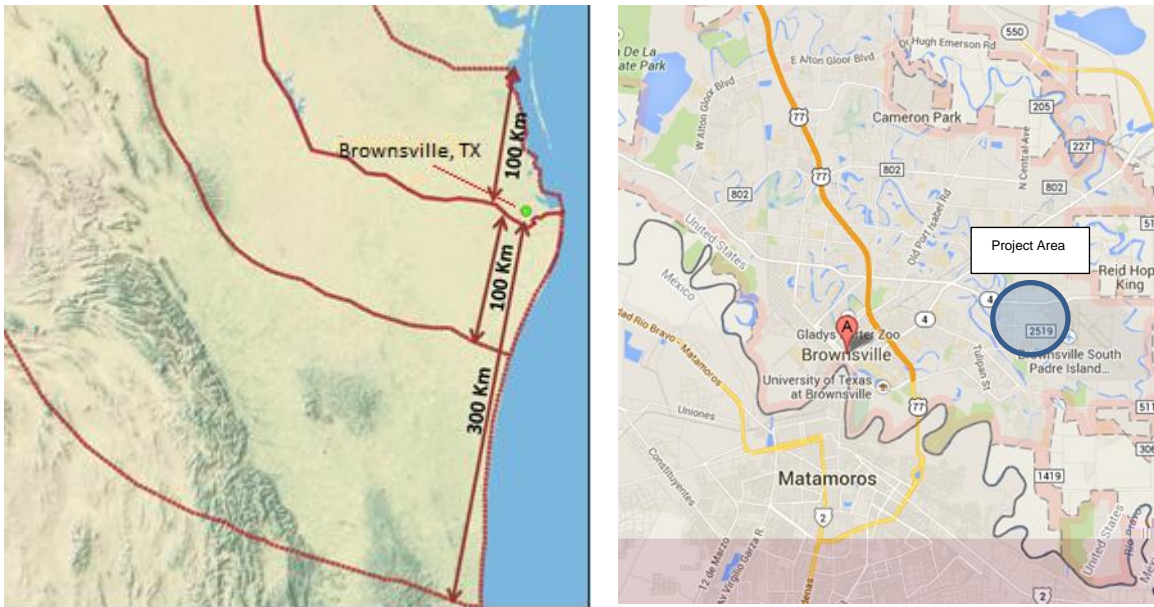
2.1.1. Project Description

Geographic Location

The Project area is located in the southern area of the City of Brownsville, near the Brownsville/SPI International Airport between FM 802 to the North, Florida Road to the South, Vermillion Road to the West, and Oklahoma Road to the East.

Figure 1 shows the approximate location of the Project.

Figure 1
PROJECT VICINITY MAP



General Community Profile

According to the U.S. Census Bureau, as of 2013, the City of Brownsville's estimated population was 177,795 inhabitants⁴ with an estimated average annual growth rate of 2.28% for the previous 10 year period. The City's economic activity is largely based on manufacturing, international trade with Mexico and services.

Brownsville, serving as the county seat of Cameron County, benefits from an advantageous location in the lower Rio Grande Valley and from its status as highly used port of entry from Mexico with highway, air, rail and shipping transportation modes. The Port of Brownsville houses more than 230 companies performing offshore oil rig construction, ship repair and construction, rail car rehabilitation, as well as steel and petroleum transportation services. The city's low cost of living, reflected in affordable housing, supports economic growth.⁵

The estimated Median Household Income (MHI) for the City of Brownsville was US\$32,105 in 2013 with 35.3% of its residents living below the poverty level. The MHI for Cameron County was US\$33,179 and 34.8% of its population lived below the poverty level. Comparatively, the MHI for the State of Texas was US\$51,900 and 17.6% of the state's population lived below the poverty level.⁶ The city has an economically active population of 43,989 persons.⁷

⁴ Source: U.S. Census Bureau. "2009-2013 5-Year American Community Survey." Web, accessed on May 13, 2015.

⁵ Source: Fitch Ratings. "Fitch Rates Brownsville, TX; Outlook Stable." Web, accessed on May 13, 2015.

⁶ Op. cit. U.S. Census Bureau. "2009-2013 5-Year American Community Survey." Web, accessed on May 13, 2015.

⁷ Source: <http://www.infoplease.com/us/census/data/texas/brownsville/economic.html>

BPUB provides water, wastewater and electrical services for the City of Brownsville and neighboring areas. The status of public services in the BPUB service area, which includes the city of Brownsville and the adjacent areas to be served by the Project, is described in the following table.

**Table 1
(BPUB) BASIC PUBLIC SERVICES AND INFRASTRUCTURE**

Water System¹			
Coverage:	97.9%		
Water supply source:	Rio Grande River/ Southmost Regional Water Authority Well Fields (desalination facility)		
Number of hookups:	49,356 (45,063 residential)		
Wastewater Collection System			
Coverage: ²	97.3%		
Number of connections: ³	49,075 (45,235 residential)		
Wastewater Treatment			
Service Coverage: ⁴	100%		
Treatment facilities:	Plant	Type	Capacity
	Robindale WWTP	Activated sludge	14.5 mgd
	South WWTP	Activated sludge	12.8 mgd
Solid Waste			
Solid waste collection:	100%		
Final disposal:	Landfill		
Street Paving			
Coverage:	%		
	No data		

¹ Source: Information provided by BPUB, April 2015.

² Calculation based on water and sewer connection data provided by BPUB, 2015.

³ Source: Information provided by BPUB, April 2015. Some areas served by BPUB ww services receive drinking water services from another water utility.

⁴ Service coverage for wastewater treatment equals the percentage of discharges collected through the centralized collection infrastructure that are treated by a centralized wastewater treatment facility.

Local Wastewater System Profile

Residents within the Project area currently use on-site septic tank/drain field systems with a few dwellings being served by other types of on-site systems. Most of the on-site wastewater disposal systems were installed prior to Cameron County's adoption of model subdivision rules and septic tank design standards. Due to population density, small lot sizes, high water tables, and poor storm water drainage, the majority of these systems are generally not considered to be in compliance with regulatory requirements. In a considerable portion of the Project area, a health hazard likely exists, particularly during wet weather. On December 17, 2002, the Texas Department of Health issued a Nuisance Findings Determination for the Project Area. Therefore, the need for a different method of wastewater treatment and collection is necessary. Based on

this, the Project was prioritized for funding with Category 1 conditions, including non-compliant, failing on-site systems, through the US-Mexico Border Water Infrastructure Program.

In 2012, as part of this Project scope, the BPUB received funding from the Texas Water Development Board (TWDB) under the Economically Distressed Areas Program (EDAP) for the planning, acquisition, design, and construction of a sanitary collection system to serve the wastewater collection needs of the Project area. The EDAP-funded components include the construction of sewer lines, force mains, installation of new wastewater lift stations, upgrade of existing lift stations, and the connection to the City's existing collection system. This connection will be to an existing gravity sewer line. Wastewater generated in the Project area will be transported to the City's existing South Wastewater Treatment Plant (WWTP) for treatment. The South WWTP has 12.8 mgd capacity and is currently receiving 6.8 mgd. The estimated average flow from the FM-511-802 Colonia area is expected to be 210,430 gallons per day (gpd). The impact of this Project on the existing wastewater treatment infrastructure will be minimal. The entire system will be constructed primarily in existing rights-of-way (ROW); easements have been obtained where needed.

However, funding was not provided in the initial construction grant under the EDAP program for the connection of the individual homes to the new sewer system. Due to the strained economic conditions of the Project area, the BPUB has requested funds to support residents in completing the connection from the house to the collection system infrastructure available at the property line and to decommission all septic tank systems and cesspools upon installation of the new wastewater collection service.

Project Scope

The Project consists of a wastewater collection service for the Project area shown in Figure 1. The proposed wastewater collection system will provide first-time access to 685 homes and includes gravity sewer collection lines; seven lift stations, and force mains; the installation of yard-line connections in order to redirect the sewer drainage of the homes from existing septic tank systems to the new wastewater collection system (WWCS), for up to 465 homes or an estimated 1,786 residents and the decommissioning of the on-site wastewater disposal systems.

Decommissioning involves the removal of sludge from the septic system by a licensed Texas Commission on Environmental Quality (TCEQ) hauler. The sludge is removed and taken to a location that is permitted to receive such waste. Thereafter, the septic tanks are, typically, crushed and filled-in with sand to the surface of the natural ground or, in some situations; the septic tank must be completely removed from the property. A few properties may have more than one septic tank; in these cases, the contractor will decommission all on-site sanitary systems inside the residential property.

The proposed collection system will transport wastewater from the resident's property line to Brownsville PUB's South Wastewater Treatment Plant, located on East Road.

Project components include:

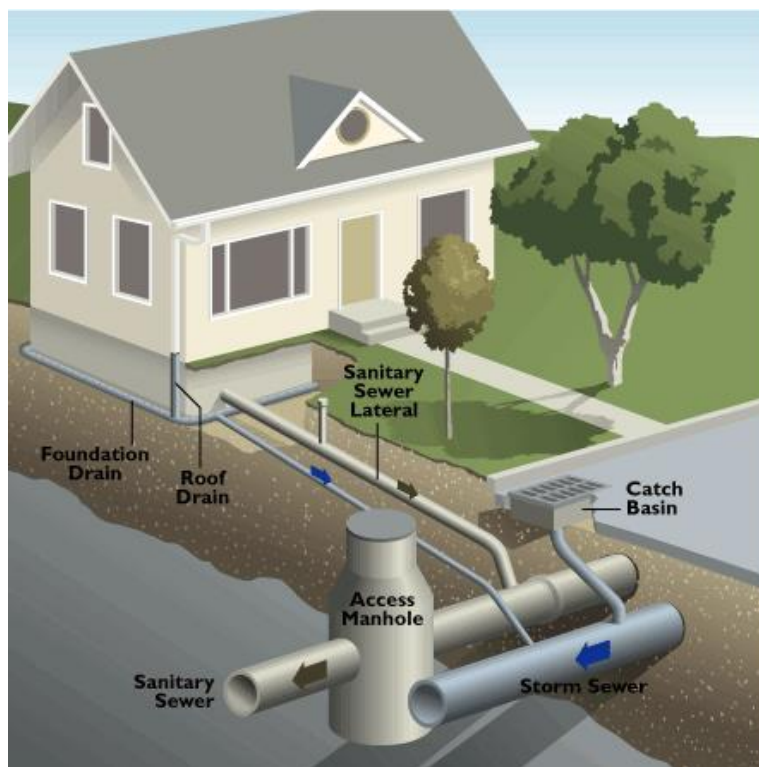
- Approximately 91,900 linear feet 8, 10, and 12-inch PVC gravity sewer lines;

- Approximately 43,500 linear feet of 4, 6, and 8-inch PVC force mains;
- Installation of seven new wastewater lift stations;
- Upgrade of three existing lift stations;
- Connection to the City's WWCS through an existing gravity sewer line; and
- Up to 465 sewer yard-line connections and decommissioning of all on-site sanitary systems inside the residential property.

In addition, the Project costs include the fees for treatment capacity and account set-up for the 465 residential lots. The remaining 220 household connections will be funded directly by the owner or through other funding sources not included in the current Project.

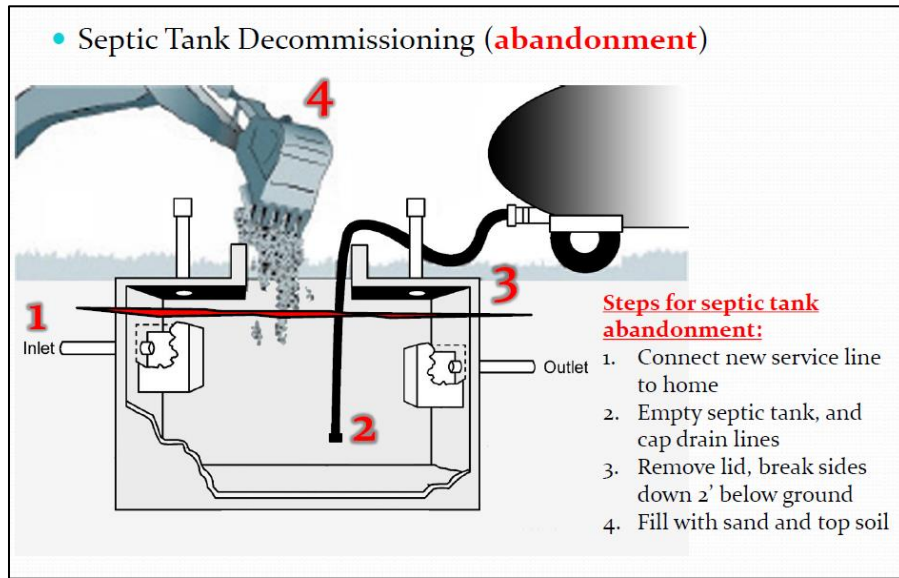
The following figure shows the schematic for the sewer residential hookup.

Figure 2
SCHEMATIC FOR THE SEWER RESIDENTIAL HOOKUP



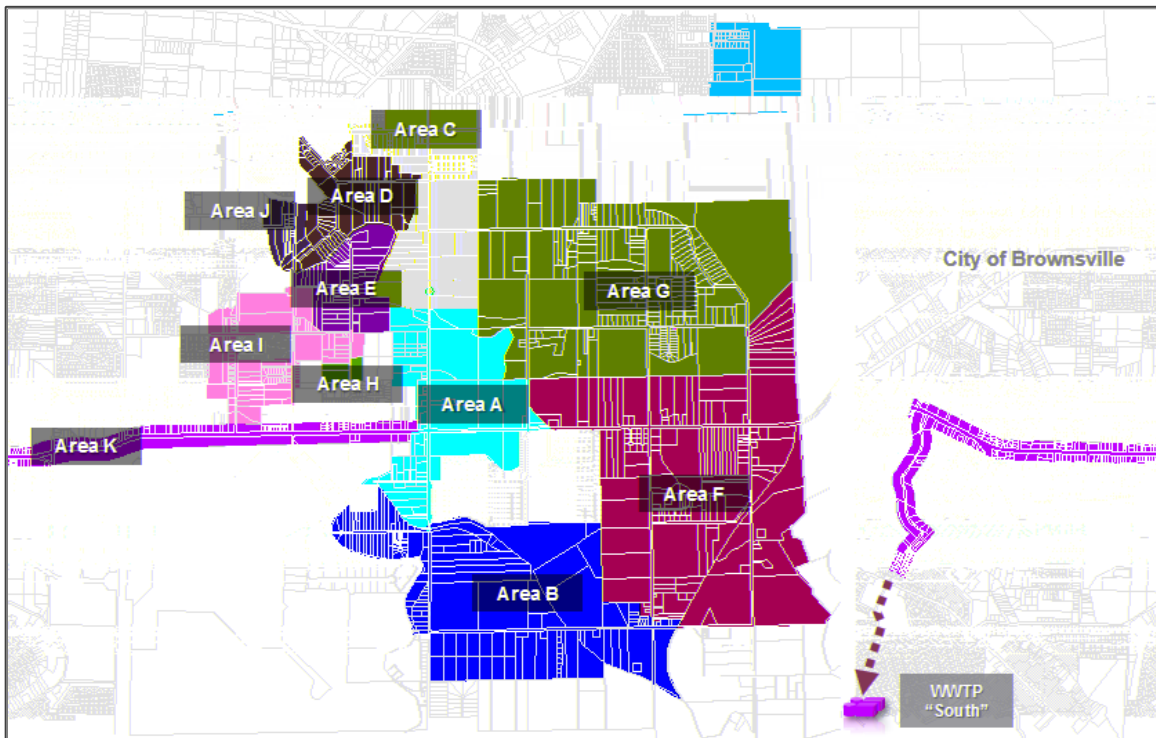
The figure 3 shows the schematic for decommission of the existing on-site sanitary systems.

Figure 3
SCHEMATIC FOR SEPTIC TANKS DECOMMISSION



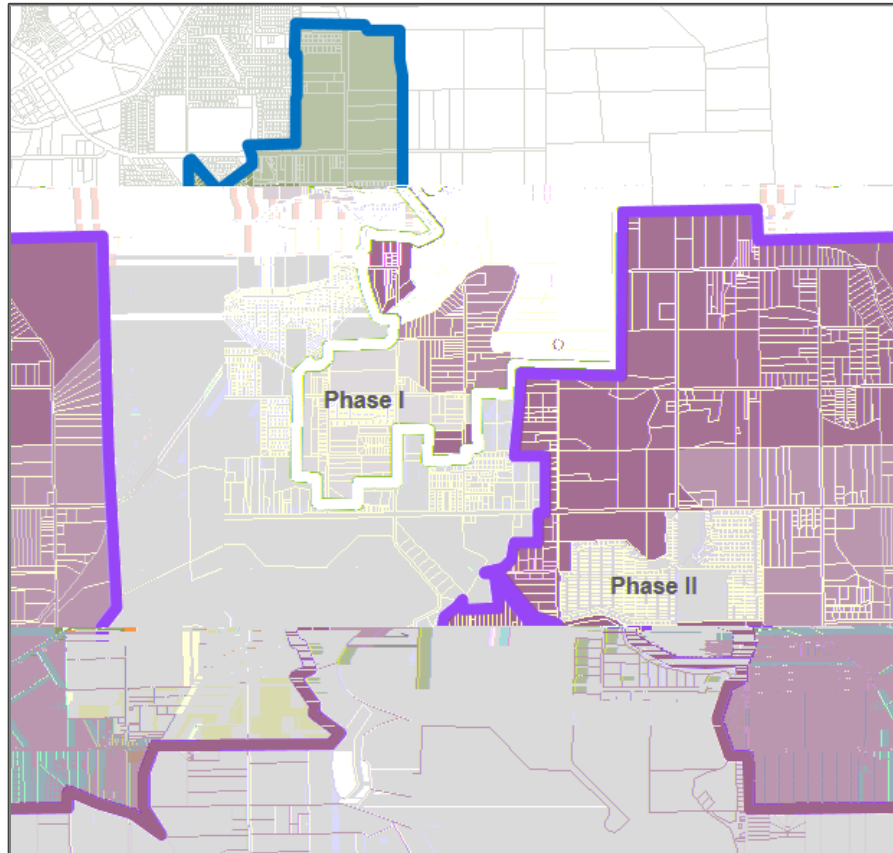
The following figure shows the location of the proposed Project components.

Figure 4
PROJECT AREA



The installation of residential connections funded by NADB-BEIF is expected to be completed in two phases including up to 224 and 241 residential connections for Phase One and Phase Two, respectively. BPUB will assist additional homeowners to connect to the system as quickly as possible either through other funding sources or if paid directly by the owner. Figure 5 shows the two phases for the residential connections project.

Figure 5
BPUB SANITARY HOOK-UPS CONSTRUCTION PHASES



Construction of the wastewater collection system initiated in 2013 and is expected to be complete in the second quarter of 2016. The wastewater collection system installation is being overseen by the Texas Water Development Board. It is estimated that once the contract for residential connections funded by NADB-BEIF receives the notice to proceed, it will take approximately 16 months to complete the two phase construction process. Potential factors affecting the Project completion timeline, such as issues with weather or delivery of the materials, were taken into account. The following milestone dates have been estimated.

**Table 2
PROJECT MILESTONES**

Key Milestones	Status
Procurement – Residential Connections	Anticipated fourth quarter of 2015
Construction period – Residential Connections	16 months from the notice to proceed (NTP).

2.1.2. Technical Feasibility

Design Criteria

The design of the FM 511-802 Colonia WWCS conforms to the standards of the (TCEQ) (Chapters 217 and 317: Design Criteria for Domestic Wastewater Systems, August 28, 2008, and Design Criteria for Sewerage Systems, January 6, 2005 respectively). The TCEQ sets standards for design, submittals, operations, maintenance, construction and safety. The applicable design standards include the sewer sizing, pipe slopes, minimum pipe cover, manhole sizing and spacing, pipe materials, pipe bedding, etc. The TCEQ standards have been developed to ensure that the sewage will flow through the system with an adequate velocity, and to minimize operations and maintenance needs.

Selected Technology

The BPUB evaluated and considered various alternatives to address the infrastructure needs of the Project Area. During hydraulic modeling and the final design process, technical options for pipe diameter, material and alignment were evaluated. To identify the most appropriate technology, technical options were evaluated pursuant to the following factors:

- Proposed layout of the sewer lines
- Required connection points for the system components
- Investment cost
- Operation and maintenance cost
- Reliability of the materials and equipment
- Sustainable practices

The pipe diameter was selected using appropriate slopes and velocities to prevent pipe silting and clogging, septic conditions, over-excavation or the need for pumping facilities that could increase project costs. Peak flow rates and maximum instantaneous flow rates were taken into consideration in order to avoid overflows. The analysis also considered using various pipe materials in compliance with applicable standards and regulations. Polyethylene, PVC, and asbestos-cement pipes were evaluated, and their characteristics and suitability for the soil type were reviewed. For the proposed Project, PVC was the selected material for wastewater collection and residential connections, which has proven to be reliable.

Additionally, EPA Project Development Assistance Funds (PDAP) were used to assist BPUB with collecting residential income data using EDAP approved survey forms (door-to-door-surveys) to

determine the households targeted for the installation of connection infrastructure through NADB-BEIF. Data gathered in these surveys was used to complete funding assessment, tables and maps and for the preparation of construction plans, specifications and contract documents for the Project.

2.1.3. Land Acquisition and Right-of-way Requirements

All work will be conducted within the easements/utility rights-of-way and will not require the purchase of any additional land or easements. Along with the door to door surveys, "Rights of Entry" forms were signed by each house owner to allow the contractor to have temporary easements for the works to be completed inside the property line.

Included in the total number of homes to be connected are homes where the sewer collection infrastructure is located in the City or County right-of-way, the collection system has also been constructed in easements that have been acquired by the Brownsville Public Utilities Board.

2.1.4. Management and Operations

Management and operation of the proposed wastewater collection and treatment Project will be the responsibility of the Utility. The sponsor has an O&M manual that includes routine tasks as well as procedures to address unexpected conditions needed to ensure a proper operation of the system. BPUB currently serves approximately 49,356 water hookups and 49,075 wastewater connections in its service area. The Utility is organized in three main departments, including: Energy, Water, and Wastewater and the supporting areas of Customer Service, Human Resources, Purchasing, Finance and Communications. The impacts of the proposed Project to the O&M budget and procedures have been reviewed and considered sustainable.

In accordance with funding program requirements, the utility is responsible for demonstrating the regular application of a pretreatment program. On February 15, 2011, BPUB adopted the City of Brownsville Pretreatment Ordinance 2011-75-F which includes rules, regulations, and fees for the Utility, regulating sewer use, sewer construction and industrial wastewater discharges. The BPUB has also a Pretreatment Department which administers the regulations to control pollutants discharged from Commercial and Industrial Users (IUs) which may pass through or interfere with the utility's Publicly Owned Treatment Works (POTW). The pretreatment program administers and enforces the regulations in order to protect BPUB's wastewater collection systems, treatment plants and workers.

2.2. ENVIRONMENTAL CRITERIA

2.2.1. Compliance with Applicable Environmental Laws and Regulations

Applicable Laws and Regulations

The Project is subject to the environmental clearance process included in the *National Environmental Policy Act (NEPA)*. In considering funding from the US-Mexico Border Water Infrastructure Program, the Project was reviewed in accordance with the U.S. National Environmental Policy Act (NEPA), 42 USC §§4321-4370f. In accordance with NEPA, Council on Environmental Quality (CEQ) regulations found at Title 40 CFR §§1500.1-1508.28, and EPA NEPA regulations at 40 C.F.R. Part 6, EPA Region 6 completed the environmental review and clearance process.

Additionally, due to funding participation for the Project through TWDB's EDAP, the Director of the Project Engineering and Review section must also consider the environmental effects of the Project and issue an environmental clearance authorization in accordance with State law.

Environmental Studies and Compliance Activities

Pursuant to environmental assessment requirements of Sections 363.14 and 363.16 of the Texas Water Development Board (TWDB) Rules, BPUB prepared on May 2008 the document named: *"Environmental Review of Proposed Construction, Brownsville Public Utilities Board, Cameron County, Economically Distressed Areas Program (EDAP) Project # 10344"*. TWDB issued the corresponding memorandum of approval on July 2, 2008, stating that that no significant adverse environmental impact should result from the construction of this project.

On December 15 2010, TWDB issued a second memorandum of approval for the document named *"Amendment to the environmental Information Document FM 511-802 Study Area Wastewater Improvement Project, Economically Distressed Areas Program, Brownsville, Cameron County, Texas"*. This Amendment included a change in the route for one of the force mains which will result in a shorter line and adequate capacity for the Project area.

Since the Project is subject to regulations under NEPA; an Environmental Information Document (EID) was prepared for the Project. The EID discloses the environmental impacts that would result from the implementation of the Project. The document presents an assessment of the Project alternatives related to the following areas for environmental consequences:

- Air quality, odors, and greenhouse gas emissions
- Noise impacts
- Water quality, hydrology and floodplain impacts
- Biological resources and wetland impacts
- Cultural and historic resource impacts
- Geology and soils impacts
- Municipal and public service impacts
- Public health, hazards and waste management

- Socioeconomic conditions
- Land use and planning
- Transportation and circulation
- Utilities and service systems, and
- Environmental justice

Based on the findings and conclusions of the EID, EPA Region 6 prepared an Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI), which was issued in December 9, 2014, determining that implementation of the proposed Project, will not result in significant impacts to the environment. Although the EA concluded that there will be no significant adverse impacts on the environment, mitigation measures were established in the document to address temporary, minor adverse impacts during construction and are enforceable under the FONSI. These measures are provided, in summary, in Section 2.2.2., below, and available for detailed review in the official FONSI document.

Pending Environmental Tasks and Authorizations

There are no environmental authorizations pending.

Compliance Documentation

The following authorizations have been obtained for the Project:

- Memorandum for the no significant adverse environmental impacts for the “Environmental Review of Proposed Construction, Brownsville Public Utilities Board, Cameron County, Economically Distressed Areas Program (EDAP) Project # 10344”, Signed on July 2, 2008 by TWDB.
- Memorandum for the no significant adverse environmental impacts for the “Amendment to the Environmental Review, Brownsville Public Utilities Board, FM 511-802 Study Area, Economically Distressed Areas Program Project # 10344”, Signed on December 15, 2010 by TWDB.
- Finding of No Significant Impact (FONSI) Authorization by EPA signed on December 9, 2014.

2.2.2. Environmental Effects/Impacts

Existing Conditions and Project Impact – Environment

Currently, Project area residents have drinking water services but they lack wastewater collection services. Residents living in this area use on-site septic tanks or open cesspools for their wastewater disposal needs. Most of the existing septic tank systems are substandard due to improper design, inadequate construction, and poor owner maintenance. The results of a survey of the wastewater disposal methods in the area indicate almost 100% of the systems have already failed or are in the process of failing due to disrepair caused by design flaws or lack of proper maintenance.

The soils in the Project area are also not conducive to proper operation of septic tank systems, and exhibit severe limitations due to slow absorption and percolation rates. Population density and small lot sizes exacerbate the problem. Additionally, the relatively flat topography of the area is prone to flooding which mixes with raw wastewater stored in open cesspools or discharged from septic tanks, and flows into local yards, streets, and other low lying areas. The raw wastewater entering both surface and groundwater threaten the overall water quality in the region. The problems associated with system overflows, backups, and raw wastewater discharges are causing a public health hazard in the Project area due to the release of various pathogens into the environment from improperly treated wastewater. The Texas Department of State Health Services issued an opinion that a nuisance existed in the project area, considered dangerous to the public health and safety. Therefore, the need for a different method of wastewater treatment and collection is required.

The wastewater collection system will eliminate approximately 210,430 gallons per day (gpd) of untreated or inadequately treated wastewater discharges. The risk for waterborne diseases transmission and the level of environmental contamination will be reduced as a result of the implementation of the Project.

The following are the expected Project environmental benefits:

- Provide access to wastewater collection and treatment services for 685 homes, of which up to 465 new residential connections will be installed through NADB-BEIF funding;
- Eliminate untreated wastewater discharges of approximately 0.21 mgd.

Mitigation of Risks

Although implementation of the Projects will have no significant adverse impacts on the environment, mitigation measures were established to address temporary, minor adverse impacts during construction. Potential impacts during construction include the following:

- The local air basin will be temporarily impacted by emissions of carbon monoxide, nitrous oxide and sulfur dioxide emissions due to vehicles and equipment used during construction.
- Noise levels may be elevated during construction activities. This impact is short in duration and concentrated to the work area and will include temporary roadway blockages; as well as presence of workers in the area.
- Surface water resources could be temporarily impacted by construction storm water runoff.
- Threatened and endangered species may be disturbed.

In summary, the mitigation measures include the following:

- Best Management Practices (BMP) and compliance with local ordinances to reduce the temporary impacts of construction.
- The BPUB is responsible for continued coordination with both the U.S. Fish and Wildlife Service (USFWS) and the Texas Park and Wildlife (TPWD) to insure that protected

species and their designated habitat in the area will not be adversely impacted by construction.

- If cultural materials are encountered during construction, work will stop immediately in the general area of the discovery, and the funding recipient will immediately notify the SHPO of the discovery.
- The BPUB is responsible for continued coordination with the TCEQ, and must obtain and abide by any/all necessary permits to insure that ground water resources in the area will not be adversely impacted by the construction.
- All vehicles and equipment used in the construction of this project must comply with federal regulations concerning the control of air pollution from mobile sources.

By following BMPs the temporary impacts due to construction will be minimized and long-term environmental impacts resulting from the Project's implementation will be positive overall.

Natural Resources Conservation

The Project contributes to improved water resource management and conservation, by protecting surface and ground water from inadequately treated sewage discharges conveying it to the existing South WWTP for treatment. The WWCS has been designed for energy efficiency, utilizing gravity and high efficiency pumps to convey the collected wastewater flows.

No-action Alternative

The no-action alternative was not considered because the consequences of not developing the Project included the following:

- Non-compliance with environmental and health-related directives developed by the EPA, and the Texas Department of Health.
- Non-compliance with federal- and state-mandated environmental protection laws, rules, and regulations developed to protect human health and the environment.
- Continued pressure for municipal services in areas with rapidly expanding, minority, and lower-income populations.
- Increasing potential for surface water and groundwater contamination from untreated or poorly treated sewage discharged at the surface and the potential degradation of Rio Grande water quality.
- The health and safety of the Project area residents and people of the City of Brownsville would be negatively impacted through lack of adequate wastewater collection and treatment services.
- The long-range development goals of the City of Brownsville would not be met. Achievement of multi-national environmental and human health protection goals developed between the governments of the United States and Mexico would be less likely to be implemented in a timely and proactive manner.

Existing Conditions and Project Impact – Health

The Project is aimed at eliminating risks associated resulting from human contact with inadequately treated wastewater. According to World Health Organization (WHO) sanitation projects can have the following benefits:⁸

- Improved sanitation reduces diarrhea morbidity by 32%.
- One gram of feces may contain 10M viruses, 1M bacteria, 1000 parasitic cysts, and 100 Helminths eggs.
- 4% of global disease burden can be prevented through improved water supplies, sanitation, and hygiene.

Waterborne diseases are caused by pathogenic microorganisms that are transmitted as a result of inadequate wastewater disposal practices and unsafe water supplies. An individual may become ill after drinking water that has been contaminated with these organisms; eating uncooked foods that have been in contact with contaminated water; or through poor hygiene habits that contribute to the dissemination of diseases by direct or indirect human contact. Table 4 shows waterborne statistics for Cameron County, Texas.

Table 4
WATERBORNE DISEASE STATISTICS FOR CAMERON COUNTY, TX*

Disease	Number or Annual Cases				
	2014**	2013	2012	2011	2010
Amoebiasis	0	0	4	1	0
Campylobacteriosis	48	62	51	18	39
Cryptosporidiosis	2	8	11	23	20
Shigellosis	14	60	41	66	99

* Source: Cameron County Department of Health and Human Services.

** 2014 numbers are still being entered into the database. 2014 numbers are not final.

Transboundary Effects

Due to the proximity of the City of Brownsville with the Mexican city of Matamoros, there are frequent border crossings between these communities. The construction of wastewater collection infrastructure, in these currently unserved areas, will have a direct positive impact on the health of residents of the Project area, Brownsville, Matamoros and throughout the entire region, since these actions will help reduce the risk for waterborne diseases caused by exposure to untreated discharges. Additionally, the Project's implementation will reduce the potential for contamination of shared bodies of water, including the Rio Grande.

⁸ Source: WHO, Water, Sanitation and Hygiene Links to Health, Facts and figures accessed March 13, 2014
http://www.who.int/water_sanitation_health/facts_figures/en/

2.3 FINANCIAL CRITERIA

2.3.1. Uses and Sources of Funds

The total estimated cost of the Project is US\$29,741,651 which includes the funding for construction, contingency and supervision costs, as well as connection fees. The Project meets all BEIF program criteria and has been approved by EPA for a BEIF grant of up to US\$3,628,140 for the Residential Connections to complete the financing of the Project. Table 5 presents a breakdown of total Project costs, as well as the source of funds.

Table 5
USES AND SOURCES OF FUNDS
(US\$)

Project Component	Amount	%
Construction related to the WWCS*	\$26,113,511	87.8
Construction related to residential connections	2,235,000	7.5
Contingency	297,389	1.0
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TOTAL	\$29,741,651	100.0

* Includes costs related to design, inspection, permits, surveying and testing

** Texas Water Development Board (TWDB)

3. PUBLIC ACCESS TO INFORMATION

3.1. PUBLIC CONSULTATION

BECC released the Draft Project Certification Proposal for a 30-day public comment period beginning August 21, 2015. The following documents were available, upon request:

- Final Engineering Report for the City of Brownsville- Public Utility Board, Wastewater Improvements for FM-802 E.D.A.P. Project in Brownsville, Texas. Ambiotec Civil Engineering Group, INC. 10/15/10
- Final Design for Sanitary Sewer Home Hook-Ups and Septic tank System Removal/Decommissioning for Brownsville, Texas.

- Environmental Information Document, FM 511-802 Study Area, Wastewater Improvement Project, Economically Distressed Areas Program, Brownsville, Cameron County, Texas, AEC Project No. 4060, May 2008.
- Amendment to the Environmental Information Document, FM 511-802 Study Area, Wastewater Improvement Project, Economically Distressed Areas Program, Brownsville, Cameron County, Texas, October 2010, Updated July 2014.
- Finding of No Significant Impact Issued by EPA Region-6 (December 9, 2014).
- TWDB, Memorandum of approval for the *Environmental Review of Proposed Construction, Brownsville Public Utilities Board, Cameron County, Economically Distressed Areas Program (EDAP) Project # 10344*. (July 2, 2008).
- TWDB, Memorandum of approval the document named for the *Amendment to the environmental Information Document FM 511-802 Study Area Wastewater Improvement Project, Economically Distressed Areas Program, Brownsville, Cameron County, Texas*. (December 15, 2010).
- Nuisance report by the Texas Department of Health (December 17, 2002)
- Public Participation Report including Public Meeting Minutes, pictures, articles and materials.

The public comment period ended on September 20, 2015, with no comments received.

3.2. OUTREACH ACTIVITIES

BPUB conducted extensive outreach efforts to communicate the Project characteristics, including cost and fees and to obtain the support of the residents of the Project area. In accordance with the public outreach requirements of the BEIF program, activities such as the use of a local steering committee, public meetings, and appropriate project information access where conducted as described in the Public Participation Plan (PPP). The following information provides a summary of the outreach activities carried out for the Project.

The local steering committee was formed on February 13, 2014. The steering committee included members of the community and the Utility's staff. The steering committee developed a public participation plan and periodically met with the Project team to help the Utility to disseminate information regarding the Project. The Project's technical and financial information was made available to the public for review. The steering committee, with assistance of the BPUB personnel, prepared a fact sheet and a presentation on the Project. Information on the Project was presented to the community during two public meetings.

The first Public Meeting notice was posted at the Utility and published April 20, 2014 in the Brownsville Herald. The first public meeting was held on May 21, 2014 at the Lucio Middle School, 300 N. Vermillion Road. Based on the sign-in sheet, the meeting was attended by more than 105 individuals. This meeting informed the residents of the Project characteristics, potential funding sources, and future household connections.

A second public meeting was held on August 13, 2015. During the meeting the community was informed of the proposed funding structure and potential environmental impacts of the Project. The meeting was attended by 19 residents showing their support and interest towards Project implementation. The meeting served as a discussion forum for the attendees and Project support was documented through a survey conducted at the event in which 100% of the attendants expressed their understanding and support to the Project.

Additionally, the Project included a public comment process with the publication of the environmental clearance finding on December 9, 2014. No public comments were received related to the proposed Project, or identified environmental effects of the Project.

BECC also conducted a media search to identify potential public opinion about the Project. Four articles regarding the Project were found on the Brownsville Herald. The first article reflects a BECC news release on the public meeting. The information posted on the second article from 2012 stem from a news release sent by the Texas Water Development Board regarding the Project. The third article, also from 2012, featured an interview with a resident who stated “the project will cost her thousands of dollars for something she doesn’t want or need”. The other article dated 2002 explained the need for services in the project area. There were no comments posted for the articles.

References to the Project were found in the websites listed below:

- <http://www.rgvproud.com/news/local-news/public-meeting-to-be-held-on-proposed-wastewater-improvement-project> (Posted on August 13, 2015 on RGV.com. Public meeting to be held on proposed wastewater improvement project. The Border Environment Cooperation Commission (BECC) will hold a public participation meeting on the proposed wastewater collection system improvement project for FM 511-802 Colonia in Brownsville, Texas. The meeting will be held on August 13, 2015 at 6:45 pm at the Senator Eddie A. Lucio, Jr. Middle School, 300 N. Vermillion Road).
- http://www.brownsvilleherald.com/news/valley/article_01561895-636c-5cba-b69c-d8729f610e6c.html#facebook-comments (Posted: Tuesday, April 24, 2012. Brownsville Herald: Colonias to benefit from \$24.5M grant. Some 3,604 Colonia residents living on the city’s eastside will see some improvements to the area in the form of wastewater services. The Brownsville Public Utilities Board has received a \$24.5 million grant that will provide first time municipal wastewater services to residents living along FM 802 and FM 511).
- http://www.brownsvilleherald.com/news/local/article_f54b93fc-e090-11e3-bcf4-001a4bcf6878.html (Posted: Wednesday May 21, 2014. BPUB seeks input on extension of sewer infrastructure. The Brownsville Public Utilities Board is holding a public meeting today regarding an extension of existing sewer infrastructure). The article described an interview with a resident who stated “the project will cost her thousands of dollars for something she doesn’t want or need”).

- http://www.brownsvilleherald.com/news/local/article_185a6fb0-a8d9-5824-a51c-46d5a4528ea0.html (Posted: Wednesday, February 27, 2002. Brownsville Herald: Life to get better for cluster of Colonias Wastewater: PUB to install services for eight subdivisions. Eight Colonias in Northeast Brownsville will soon receive a wastewater facility funded by a grant from the Texas Water Development Board (TWDB). The cluster of eight Colonias located off FM 802 and FM 511 has about 3,200 residents in a 25-square-mile area).

In addition, the Texas Water Development Board posted the following news release on its website:

- http://www.twdb.texas.gov/newsmedia/press_releases/2012/04/Brownsville.asp (Texas Water Development Board approves \$25,345,000 in loans to the City of Brownsville to finance wastewater service. AUSTIN - (April 19, 2012) - The Texas Water Development Board (TWDB) today approved by resolution loans in the amount of \$25,345,000, to the City of Brownsville (Cameron County), consisting of a \$24,505,000 grant and a loan of \$840,000 from the Economically Distressed Areas Program. The City of Brownsville will use these funds for the construction phase of a first-time municipal wastewater system to serve an estimated 3,605 residents in the FM 511-802 Colonia. The project area is approximately 6.5 miles east northeast of downtown Brownsville and lies within the extraterritorial jurisdiction of the City).

BECC's media search found only one reference to a concern by a local resident; however, all other articles and public meeting reaction to the Project was positive. The Project Sponsors activities and identified articles demonstrate that the public received updates related to the Project, including the Project's funding structure and financial impacts to residents that will occur due to the new wastewater collection services.