

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

2 9 JUL 2016

#### FINDING OF NO SIGNIFICANT IMPACT

### TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS:

In accordance with the environmental review guidelines of the Council on Environmental Quality found at 40 Code of Federal Regulations (CFR) Part 1500, and with the use of the implementing environmental review procedures of the United States Environmental Protection Agency (EPA) found at 40 CFR Part 6 entitled "Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act" as guidance, the EPA has performed an environmental review of the following proposed action:

Wastewater Collection and Treatment Project
Proposed by the
Comision Municipal de Agua Potable y Alcantarillado del Municipo de Guerrero, Tamaulipas
For BECC Activities
Located in Nueva Ciudad Guerrero, Tamaulipas, Mexico

Estimated EPA Share:

\$700,000 US

Estimated Local Funding:

\$2,228,900 US

The Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADB) are charged with the identification, development, certification, and funding of water, wastewater, and other environmental infrastructure projects within 62 miles on the US side of the US-Mexico border and within 186 miles on the Mexican side. The Comisión Municipal de Agua Potable y Alcantrillado del Municipio de Guerrero (COMAPA) intends to seek funding from BECC, which would make them eligible for funding from the Border Environment Infrastructure Fund (BEIF) administered by NADB, to support their application for BECC certification for rehabilitation of existing sewer collector lines, building new sewer lines, a lift station, and a wastewater treatment plant (WWTP) for Nueva Ciudad, Guerrero, Tamaulipas. The area currently has a poorly functioning wastewater collection system covering only 92.9% of homes as well as a nonfunctioning wastewater treatment system. The lack of a WWTP results in severe public health concerns and water contamination due to discharge of untreated sewage to open waterways. The absence of a waste water collection system in parts of the city has led to the necessary use of latrines and septic systems, all on inadequately sized plots of land, and leads to a high risk of groundwater contamination. Furthermore, the inadequate wastewater collection system cannot deliver all of the wastewater to the wastewater treatment system due to inadequate infrastructure and a lack of maintenance.

The existing wastewater collection and treatment systems are in poor condition which leads to an extensive threat to public health and safety. The collection system covers only 92.9% of the city, 1,100 homes out of 1,182 total homes, and consists of a combination of concrete and PVC pipes of 8-24 inches in diameter. Though the PVC pipes were installed to replace some of the concrete pipes, 72% of the existing pipes, or 86,165 ft, consists of the deteriorating concrete pipes, in poor condition due to old age and corrosion. The two existing lift stations are functioning though the north lift station is missing a pump and in need of structural fortification. The existing wastewater treatment system consists of an Imhoff tank in the southern area of Nueva Ciudad Guerrero, however it is nonfunctioning though water runs through it, and not all collected wastewater is transported through it. At three separate locations, collected wastewater passes under Mexican Federal Highway 2, running along the southern border of Nueva Ciudad Guerrero, one coming straight from the Imhoff tank. All three of these wastewater collections are discharged to surface level and into dry creek beds, which lead into another, larger creek called the Arroyo el Coronel which consists mostly of wastewater from Nueva Ciudad Guerrero. Downstream, Arroyo del Coronel runs into the Rio Grande.

The proposed action would build a new WWTP and improve on the existing collection system. COMAPA purchased 62 acres of previously disturbed land on which to build the new WWTP, though only about 6.7 acres of it will be cleared and grubbed for the purpose of building the WWTP. Under the proposed action, the WWTP would be comprised of a manual coarse screen leading to a series of three lagoons, and anaerobic lagoon followed by a facultative and then maturation lagoons, which would cover about 2.5 acres of the cleared land. Every ten years, the sludge from the anaerobic and facultative lagoons would be cleared using heavy machinery, dried in a side sludge drying bed of approximately 2,100 ft2, and would be disposed of according the applicable local rules and regulations. The treated wastewater effluent generated by this WWTP would comply with Mexican regulation NOM-001 SEMARNAT-1996 and would be discharged through a 1,150 ft discharge pipeline into the Arroyo el Coronel, flowing into the Rio Grande approximately 3.5 miles downstream. Building of new wastewater collectors and the rehabilitation and replacement of the existing collectors would include 14,300 ft of new PVC pipes, 8 to 24 inches in diameter, the replacement of 86,300 ft of existing sewer lines, and 2,350 ft of an 8 inch new force main. One new lift station will be built on previously disturbed land along the Mexican Federal Highway 2, and the existing north lift station will receive structural fortification and a new pump. All collected wastewater will flow to the WWTP, eliminating the existing three discharges of untreated wastewater to surface level, as mentioned above.

The Comision Municipal de Agua Potable y Alcantarillado del Municipo de Guerrero, Tamaulipas, has submitted an application under the EPA prioritization process to the Border Environment Cooperation Commission (BECC) for certification of the project. After the project application was reviewed and ranked by the BECC with EPA assistance, the applicant was selected to receive funding from the EPA Project Development Assistance Program administered by BECC. Upon certification, the project will receive Border Environment Infrastructure Fund

(BEIF) assistance administered by the North American Development Bank (NADB). Both the BECC and the NADB are bi-national sister organizations created by the governments of the United States and Mexico to improve the environmental conditions in and along the United States/Mexico border region. The applicant will utilize the BEIF funding support to finance the proposed construction project. The improvements should continue to protect the health and welfare of the citizens living in the immediate vicinity.

The environmental review process, which is documented by the enclosed Environmental Assessment, indicates that no potential significant adverse environmental impacts are anticipated from the proposed action. The project individually, cumulatively over time, or in conjunction with other actions is not expected to have a significant adverse effect on the quality of the environment. On that basis, I have determined that the project is not a major federal action significantly affecting the quality of the human environment, and that preparation of an Environmental Impact Statement is not necessary. My preliminary decision is based upon the enclosed Environmental Assessment, a careful review of the Environmental Information Document prepared for the project, the results of the public participation process, and other supporting data which are on file in the office listed below and available for public review upon request. Therefore, I am issuing this preliminary Finding of No Significant Impact pertaining to the project.

Comments regarding my preliminary decision may be submitted for consideration to the attention of the Special Projects Section (6EN-WS), Environmental Protection Agency, 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733. After evaluating any comments received, the EPA will make a final decision. No administrative action will be taken on this preliminary decision for at least 30 calendar days after release of this Finding of No Significant Impact. The preliminary decision and finding will then become final after the 30-day comment period expires if no new significant information is provided to alter this finding.

Responsible Official,

John Blevins

Director

Compliance Assurance and

**Enforcement Division** 

Enclosure

cc: C. Jorge Lorenzo Wllasenor Gonzalez, General Manager Comisión Municipal de Agua Potable y Alcantrillado del Municipio de Guerrero

Renata Manning, Director of Projects Border Environment Cooperation Commission

Jeff Walker, Executive Administrator Texas Water Development Board

#### ENVIRONMENTAL ASSESSMENT

# WASTEWATER COLLECTION AND TREATMENT PROJECT Proposed by the BORDER ENVIRONMENT COOPERATION COMMISSION On Behalf of the NUEVA CIUDAD GUERRERO, TAMAULIPAS, MEXICO

# **BACKGROUND**

The Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADB) are charged with the identification, development, certification, and funding of water, wastewater, and other environmental infrastructure projects within 62 miles on the US side of the US/Mexico border and within 186 miles on the Mexican side. The Comisión Municipal de Agua Potable y Alcantrillado del Municipio de Guerrero (COMAPA) intends to seek funding from BECC which would make them eligible for funding from the Border Environment Infrastructure Fund (BEIF) administered by NADB. Their application is or will be for BECC certification for rehabilitation of existing sewer collector lines, building new sewer lines, a lift station, and a wastewater treatment plant (WWTP) for Nueva Ciudad Guerrero. Tamaulipas. The area currently has a poorly functioning wastewater collection system covering only approximately 93% of homes, as well as a nonfunctioning wastewater treatment system. The lack of a WWTP results in severe public health concerns and water contamination due to the discharge of untreated sewage to open waterways. The absence of a waste water collection system in parts of the ciudad has led to the necessary use of latrines and septic systems, all on inadequately sized plots of land, and leads to a high risk of groundwater contamination. Furthermore, the inadequate wastewater collection system cannot deliver all of the wastewater to the wastewater treatment system due to inadequate infrastructure and a lack of maintenance.

The existing wastewater collection and treatment systems are in poor condition which leads to an extensive threat to public health and safety. The collection system covers only approximately 93% of the city, 1,100 homes out of 1,182 total homes, and consists of a combination of concrete and PVC pipes of 8-24 inches in diameter. Although the PVC pipes were installed to replace some of the concrete pipes, 72% of the existing pipes, or 86,165 linear feet, consists of the deteriorating concrete pipes which are in poor condition due to old age and corrosion. The two existing lift stations are functioning though the north lift station is missing a pump and in need of structural fortification. The existing wastewater treatment system consists of an Imhoff tank in the southern area of the ciudad, but it is nonfunctioning though water runs through it, and not all collected wastewater is transported through it. At three separate locations, collected wastewater passes under Mexican Federal Highway 2, which runs along the southern border of the ciudad, one coming straight from the Imhoff tank. All three of these wastewater

collections are discharged to surface level and into dry creek beds, which lead into another, larger creek called the Arroyo el Coronel which consists mostly of wastewater from the ciudad, and eventually runs into the Rio Grande.

The proposed action would build a new WWTP and improve on the existing collection system. COMAPA purchased 62 acres of previously disturbed land on which to build the new WWTP, though only about 6.7 acres of it will be cleared and grubbed for the purpose of building the WWTP. Under the proposed action, the WWTP would be comprised of a manual coarse screen leading to a series of three lagoons, and anaerobic lagoon followed by a facultative and then maturation lagoons, which would cover about 2.5 acres of the cleared land. Every ten years, the sludge from the anaerobic and facultative lagoons would be cleared using heavy machinery, dried in a side sludge drying bed of approximately 2,100 ft<sup>2</sup>, and would be disposed of according the applicable local rules and regulations. The treated wastewater effluent generated by this WWTP would comply with Mexican regulation NOM-001 SEMARNAT-1996 and would be discharged through a 1,150 linear feet discharge pipeline into the Arroyo el Coronel, which flows into the Rio Grande approximately 3.5 miles downstream. Building of new wastewater collectors and the rehabilitation and replacement of the existing collectors would include 14,300 linear feet of new PVC pipes, 8 to 24 inches in diameter, the replacement of 86,300 linear feet of existing sewer lines, and 2,350 linear feet of an 8-inch new force main. One new lift station will be built on previously disturbed land along the Mexican Federal Highway 2, and the existing north lift station will receive structural fortification and a new pump. All collected wastewater will flow to the WWTP, eliminating the existing three discharges of untreated wastewater to surface level as mentioned above.

The purpose of this project is to provide adequate, safe, and environmentally responsible wastewater treatment support to the ciudad located in Tamaulipas, Mexico, and would comply with the Mexican regulations for wastewater treatment systems. The COMAPA will use special congressional funding to finance \$700,000 of the proposed action, and \$2,228,900 is expected to be funded through Mexico's federal, state, and local funding. The project area is shown on the map enclosed as Exhibit A.

The proposed project is considered to be a federal action requiring compliance with the National Environmental Policy Act (NEPA). In accordance with the environmental review requirements of the Council on Environmental Quality found at 40 Code of Federal Regulations (CFR) Part 1500, and with the use of the Environmental Protection Agency's (EPA) implementing regulations found at 40 CFR Part 6 entitled "Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act" as guidance, the EPA is preparing this Environmental Assessment to assist in determining the environmental impacts of the proposed action, and in evaluating whether an Environmental Impact Statement or a Finding of No Significant Impact will be prepared for the proposed project.

# PROJECT DESCRIPTION

The following construction and rehabilitation activities are proposed to build the new WWTP, and improve upon the existing wastewater collection system for the ciudad:

- 1. Removal and replacement of existing 86,300 linear feet of existing sewer lines;
- 2. Installation of new 14,300 linear feet PVC sewer lines, a lift station, and 2,350 linear feet force main;
- 3. Structural fortification of existing north lift station;
- 4. Construction of an entirely new WWTP;
- 5. Installation of all necessary structures, equipment, hookups and connections necessary to insure proper functionality and operation of all components of the project.

All work will be conducted within existing rights of way, and on the 62 acres already purchased for the proposed project. The project will not require the displacement of any person, home, or business, and will serve all populations equally without adverse construction or environmental impacts that are considered disproportionate to any particular portion of the population.

# ALTERNATIVES TO PROPOSED PROJECT

The funding recipient evaluated and considered a range of various alternatives to address the infrastructure needs of the area. Important factors influencing the evaluation of the processes and their recommended solutions include environmental acceptability, overall costs, availability of land for the intended uses, maximum reuse of existing facilities when applicable, operation and maintenance costs, system reliability, accommodation of future expansion needs, and public acceptance. A complete description of the alternatives is provided in the Environmental Information Document (EID) developed and provided by the funding recipient for the project.

# ENVIRONMENTAL SETTING

The city of Nueva Ciudad Guerrero is located in the state of Tamaulipas in northeastern Mexico. It is in the Guerrero Municipality, Tamaulipas, southwest of the Falcon Reservoir. Nueva Ciudad Guerrero is 3.9 miles from the US/Mexico border and in the vicinity of the Rio Grande. The Lake Falcon Dam International Border separates the ciudad and Falcon Heights, a Texas city located directly across from the ciudad. Nueva Ciudad Guerrero itself has lands developed for residential, commercial, and service sector uses and is surrounded by cropland, pastureland, and rangeland which is comprised of mostly shrubs and brush. The ciudad is bordered the south by the Mexican Federal Highway 2 lands used for transportation.

Nueva Ciudad Guerrero lies about 161 miles inland from the nearest National Oceanic and Atmospheric Association (NOAA) weather station in Brownsville, Texas, the climate is typically dryer than the recordings given by the NOAA station. However, the Brownsville

NOAA weather station records an annual precipitation of 38.37 inches and an annual mean temperature of 74.67°F, with humidity ranging from 89% in the morning to 69% in the afternoon.

There are no national landmarks, wilderness areas, or wild or scenic rivers within or immediately adjacent to the project area. There are no important farmlands, prime forest land or prime rangeland that will be disturbed by the proposed project. The project will serve all populations equally, and will not exclude any particular person or population. The general social and economic characteristics of the community will not be changed or negatively impacted, and current land use patterns will not change. The benefits, costs and minor impacts of the project, such as limited noise and dust created during eventual construction activities, will be shared equally by all citizens and will cease upon completion of the project. A more detailed description of the local environment is provided in the EID developed for the project.

# IMPACTS OF THE PROPOSED PROJECT

The proposed project was analyzed to identify potential short-term, long-term, and cumulative impacts on the environment. Factors that were considered include the probability of impact occurrence, magnitude of any occurrence, if any predicted occurrence is determined to be reversible/irreversible, direct/indirect or one-time/cumulative, the proposed action's conformity to legal mandates, and the social distribution of risks and benefits. The proposed project is not expected to have a substantial negative impact upon current land uses or land values, nor is it anticipated to have a substantial impact upon the values of surrounding land holdings. The proposed action is expected to have energy requirements typical of other construction projects of similar scope, size and duration, and will be conducted in accordance with the requirements of all applicable federal, tribal, state and local regulations.

The majority of the impacts associated with construction will be short-term and temporary, and will cease immediately upon completion of construction work in any particular area. There are not any anticipated significant adverse environmental impacts associated with the proposed action that cannot be reduced to acceptable levels. The only irretrievable resources committed to the construction portion of the project are labor, machinery wear, materials, funds spent, and energy consumed during construction. The potential short and long-term, direct, indirect and cumulative impacts resulting from the proposed action are identified and discussed below.

1. Biological Resources Including Threatened and Endangered Species: Based upon initial coordination with the United States Fish and Wildlife Service (USFWS) and the Texas Parks and Wildlife Department (TPWD), construction of the proposed project should not have significant adverse impacts to biological resources in the Unites States nor to the Rio Grande. The funding recipient is responsible for continued coordination with the USFWS and TPWD and must obtain and abide by any/all necessary permits and recommendations to insure that protected species and their designated critical habitat in the area will not be adversely impacted by construction.

- 2. Cultural/Historic Resources: Based upon initial coordination with the Instituto Nacional de Antropologia e Historia (INAH), construction of the proposed project should not have significant adverse impacts to archaeological, historical, architectural, or cultural resources. Artifacts of low importance were found outside of the project area, the INAH suggests an archeologist be on site during excavation for the construction of the WWTP and any related excavation. 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 INAH of the discovery. If the proposed project should change in construction or location outside of the given project area coordinates, the funding recipient must contact INAH for further approval. The funding recipient is responsible for continued coordination with the INAH to insure that such resources are protected during construction activities.
- 3. Floodplain: Based upon initial coordination with the Comision Internacional de Limites y Aguas, Seccion Mexicana (MCILA), and the Starr County Emergency Management Coordinator (SCEMC), construction of the proposed project should not have significant adverse impacts to the floodplain. The MCILA recommends the use of gravity flow to the largest extent possible and, should any construction be conducted within the Rio Grande floodplain, the funding recipient must submit for further approval. The funding recipient is responsible for continued coordination with the MCILA and SCEMC to insure that eventual construction is completed in a manner consistent with the requirement to avoid or minimize damage to or within the floodplain.
- 4. Wetlands: Based upon initial coordination with the International Boundary and Water Commission, United States Section (USIBWC), construction of the proposed project should not have significant adverse impacts to designated protected wetlands within the project construction area. The proposed project involves a reach of the Rio Grande River (Segment 2302\_07) which is currently listed on the Texas 303(d) List as an impaired water body due to the pollutant bacteria. The funding recipient should ensure proper design and functioning of the WWTP in order to prevent additional pollutant loading the river. It is the responsibility of the funding recipient to obtain any and all permits if necessary prior to the initiation of construction activities. The funding recipient is responsible for continued coordination with the COE to insure that designated wetlands in the area will not be adversely impacted by eventual construction.

In order to further protect the natural beneficial functions of the floodplain and wetlands, and to minimize the potential flood hazards to life and property, the construction funding is conditioned to read:

a. The recipient agrees not to collect or treat wastewater generated by new development in the floodplain or wetlands by the project facilities for a period of 50 years from the date of the environmental assessment related to this project. This restriction does not apply to development in the floodplain or wetlands which existed prior to that date;

- b. The recipient agrees to adopt and enforce suitable ordinances and implementing procedures for effective local administration of this floodplain and wetlands service area restriction. On application of the recipient's governing body and after considering all relevant information on a proposed development's effects on the natural functions and values of the affected floodplain and wetlands, the EPA Regional Administrator may waive the service area restriction in individual cases; and
- c. EPA and the recipient intend that this floodplain and wetlands service area restriction shall benefit any person, organization, or entity possessing an interest in preservation of the natural environment in the 100-year floodplain and wetlands subject to this restriction. Any such beneficiary may seek enforcement of the restriction against the recipient or its successor in a court of competent jurisdiction, if notice of the intent to seek enforcement is first given to the recipient and the EPA Region 6, and neither entity initiates corrective action within 90 days of receiving such notice.
- 5. Surface Water Resources: Based upon initial coordination with the National Park Service, construction of the proposed project should not have significant adverse impacts to protected surface water resources. The funding recipient is responsible for continued coordination with the National Park Service, and must obtain and abide by any/all necessary permits to insure that surface water resources in the area will not be adversely impacted by the construction.
- 6. Ground Water Resources: Based upon initial coordination with the National Park Service, construction of the proposed project should not have significant adverse impacts to ground water resources. The funding recipient is responsible for continued coordination with the National Park Service, and must obtain and abide by any/all necessary permits and recommendations to insure that ground water resources in the area will not be adversely impacted by the construction.
- 7. Prime and Unique Farmlands: The project was reviewed to ensure construction of the proposed project should not have significant adverse impacts to protected soils or farmlands. The funding recipient is responsible for continued coordination with the appropriate agency to insure that protected soils and farmlands will not be adversely impacted by the construction.
- 8. Air Quality: The project was reviewed to ensure construction of the proposed project should not have significant adverse impacts to air quality. Star County is currently unclassified or in attainment of the National Ambient Air Quality Standards for all six criteria pollutants. Therefore, a general conformity analysis will not be required. 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. EPA encourages the use of clean, lower-emissions equipment and technologies to reduce pollution. Also, EPA's final Highway Diesel and Non-road Diesel Rules mandate the use of lower-sulfur fuels in non-road and marine diesel engines. Adherence to these recommendations will insure that construction of the proposed project should not have

significant adverse impacts to the air quality in the area. The funding recipient is responsible for continued coordination with the appropriate agency to insure that air quality will not be adversely impacted by the construction.

- 9. Environmental Justice: The project was reviewed to ensure that the current land purchase and eventual construction will be conducted in an appropriate manner so that all persons and populations are served equally by the infrastructure improvements. Based upon the results of an evaluation to rank the potential environmental impacts to local communities using a computer-assisted mathematical formula, including Geographical Information System maps and census demographic data, no persons or populations will be discriminated against or denied the benefits of the proposed project. Since all persons and populations will be served equally by the project, there will be no adverse impacts that are considered disproportionate to any particular portion of the population.
- 10. Coastal and Barrier Resources: Since the entire project planning area is located inland and not adjacent to any coastal location, the proposed project should not have significant adverse impacts to coastal and barrier resources.
- 11. Cumulative Impacts: Potential cumulative impacts would be those impacts to the local environment that would result from the proposed project in combination with other ongoing actions, and those reasonably foreseeable future actions. No other known major construction activity is being conducted presently or planned for the immediate future. The proposed project will not individually nor cumulatively over time have a negative impact on the quality of the human or natural environment.

# DOCUMENTATION, COORDINATION, AND PUBLIC PARTICIPATION

A public hearing for the proposed project was held on July 30, 2015, at the Nueva Ciudad Guerrero, Tamaulipas, City Hall. All necessary information related to the project was available for public review and comment prior to the hearing. The purpose of the hearing was to inform the public of the proposed project, to identify any concerns, and to request public participation. The project is supported by the community, and no adverse public comments or concerns were received, although there were several verbal comments questioning street closures, noise, and the affects construction will have on everyday life.

During the process of conducting the environmental review and preparing this Environmental Assessment for the project, coordination was conducted with all required resource protection agencies and offices to solicit and incorporate their initial review and comments. Copies of this Environmental Assessment will be provided to those agencies and offices for their final review and comments. Other interested parties may request a copy of the Environmental Assessment and/or the Environmental Information Document by contacting

Magda Dallemagne, NEPA Specialist, via telephone number (214) 665-7396, e-mail at dallemagne.magdeleine@epa.gov, or in writing from the EPA, Special Projects Section (6EN-WS), 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733.

# REFERENCES

- 1. Draft Environmental Information Document, Wastewater Collection and Treatment Project for Nueva Ciudad Guerrero, Tamaulipas, Mexico, June 2015.
- 2. Supporting information and attachments to the EID.

# RECOMMENDATION

Based upon completion of this Environmental Assessment, and a detailed review of the Environmental Information Document for the project, it has been determined that construction activities are considered to be environmentally sound, and are acceptable from the standpoint of protecting public health or welfare. Therefore, it is recommended that a Finding of No Significant Impact be issued for this project.

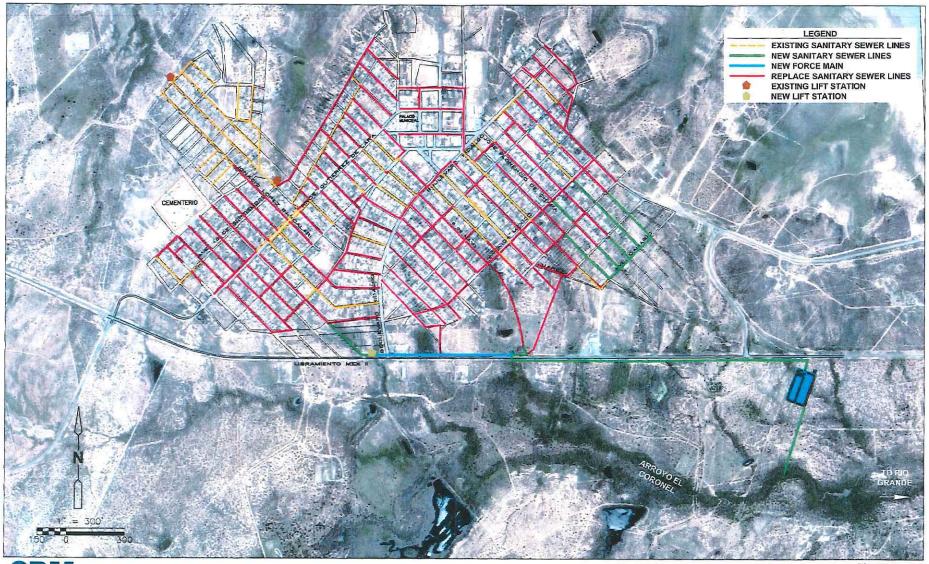


Figure No. 2-4
ALTERNATIVE 2 (PROPOSED ACTION) FOR
NUEVA CIUDAD. GUERRERO
SEPTEMBER 2015