



CERTIFICATION PROPOSAL

WASTEWATER COLLECTION SYSTEM EXTENSION AND IMPROVEMENTS FOR DOÑA ANA COUNTY, NEW MEXICO

Revised: May 10, 2021



CONTENTS

EXECUTIVE SUMMARY	1
1. PROJECT OBJECTIVE AND EXPECTED OUTCOMES	3
2. ELIGIBILITY	3
2.1. Project Type.....	3
2.2. Project Location.....	3
2.3. Project Sponsor and Legal Authority.....	4
3. CERTIFICATION CRITERIA	4
3.1. Technical Criteria	4
3.1.1. General Community Profile	4
3.1.2. Project Scope	6
3.1.3. Technical Feasibility.....	11
3.1.4. Land Acquisition and Right-of-Way Requirements	12
3.1.5. Project Milestones.....	12
3.1.6. Management and Operation.....	12
3.2. Environmental Criteria	13
3.2.1. Environmental and Health Effects/Impacts	13
A. Existing Conditions	13
B. Project Impacts.....	14
C. Transboundary Impacts.....	15
3.2.2. Compliance with Applicable Environmental Laws and Regulations.....	15
A. Environmental Clearance	15
B. Mitigation Measures	16
C. Pending Environmental Tasks and Authorizations.....	17
3.3. Financial Criteria.....	17
4. PUBLIC ACCESS TO INFORMATION	18
4.1. Public Consultation.....	18
4.2. Outreach Activities	19
5. RECOMMENDATION	20

EXECUTIVE SUMMARY

WASTEWATER COLLECTION SYSTEM EXTENSION AND IMPROVEMENTS FOR DOÑA ANA COUNTY, NEW MEXICO

Project: The proposed project consists of extending the Doña Ana County wastewater collection system to provide first-time services to the community of Sleepy Farms, near Vado, New Mexico, and upgrading Lift Station No. 7 (LS No. 7), which conveys wastewater flows from most of the South Central service area, including Sleepy Farms, to an existing wastewater treatment facility (the “Project”). The extension of the collection system includes the installation of 4,400 linear feet of trunk and lateral sewer lines, 5,000 linear feet of 4-inch diameter force main, and 30 residential connections, as well as construction of a local lift station and the decommissioning of existing on-site systems.

Objective: The purpose of the Project is to reduce the human health risks associated with waterborne diseases caused by exposure to untreated wastewater and to eliminate potential groundwater contamination from on-site disposal systems, by providing first-time access to wastewater collection infrastructure in an unserved area.

Expected Outcomes: The Project is expected to generate environmental and human health benefits related to the following outcomes:

- Provide access to wastewater collection and treatment services for 30 homes by installing residential wastewater connections.
- Prevent potential groundwater contamination and human health risks from surface pooling by decommissioning at least 30 on-site wastewater disposal systems.
- Eliminate approximately 9,400 gallons per day (gpd) of untreated or inadequately treated wastewater.¹
- Improve service for about 2,050 connections by increasing the reliability of LS No. 7 and preventing the risk of up to approximately 400,000 gpd of untreated wastewater spills.

Population to Benefit: 7,900 residents of Doña Ana County, New Mexico.²

¹ Based on generally accepted industry design practices, anticipated flows were calculated using 80 gallons per capita per day (gpd).

² The Project will benefit 30 new connections and improve service for 2,050 existing connections. Considering 3.8 persons per household in the Project area based on the indicator for the nearby city of Anthony, New Mexico, the Project will benefit an estimated 7,900 people.

Project Sponsor: Doña Ana County, New Mexico.

Estimated Construction Cost: US\$4,470,000.

NADB Grant: US\$2,150,000 grant from the Border Environment Infrastructure Fund (BEIF) funded by the U.S. Environmental Protection Agency (EPA).

Uses and Sources of Funds:
(US\$)

Uses	Amount	%
Sleepy Farms Collection System (NMED)		
Construction*	\$ 1,910,000	43.0
Construction management	200,000	4.0
Contingency	210,000	5.0
Lift Station No. 7 & Residential Connections (BEIF)		
Construction*	\$ 1,690,000	38.0
Construction management	260,000	6.0
Contingency	200,000	4.0
TOTAL	\$ 4,470,000	100.0
Sources	Amount	%
State of New Mexico Special Appropriation – NMED	\$ 2,320,000	52.0
NADB-BEIF (EPA grant)	2,150,000	48.0
TOTAL	\$ 4,470,000	100.0

* Estimated construction cost includes taxes.
 NMED = New Mexico Environment Department

Project Status:

Key Milestones	Status
Environmental clearance – U.S.	Completed
Final design	Completed
Procurement – NMED and BEIF	To begin 3rd quarter of 2021
Construction period	Estimated 12 months

CERTIFICATION PROPOSAL

WASTEWATER COLLECTION SYSTEM EXTENSION AND IMPROVEMENTS FOR DOÑA ANA COUNTY, NEW MEXICO

1. PROJECT OBJECTIVE AND EXPECTED OUTCOMES

The proposed project consists of extending the Doña Ana County wastewater collection system to the community of Sleepy Farms, near Vado, New Mexico, and upgrading Lift Station No. 7 (LS No. 7), which conveys wastewater flows from most of the South Central service area, including Sleepy Farms, to an existing wastewater treatment facility (the “Project”). The purpose of the Project is to reduce the human health risks associated with waterborne diseases and the potential for groundwater contamination related to untreated or inadequately treated wastewater discharges by providing first-time access to wastewater collection and treatment services for 30 homes and decommissioning their current on-site wastewater disposal systems, as well as improving service for 2,050 existing connections by increasing the reliability of the lift station and preventing the risk of up to approximately 400,000 gallons per day (gpd) of wastewater spills.

2. ELIGIBILITY

2.1. Project Type

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

2.2. Project Location

The Project is located near the community of Vado, New Mexico, approximately 28 miles from the U.S.-Mexico border, 20 miles south of Las Cruces, New Mexico and 30 miles north of downtown El Paso, Texas. The approximate geographical coordinates of LS No. 7 are latitude 31⁰ 114' N and longitude 106⁰ 667' W, at an approximate mean elevation of 3,825 ft. Figure 1 shows the location of the community and the Project.

Figure 1
PROJECT LOCATION MAP



2.3. Project Sponsor and Legal Authority

The Project sponsor is Doña Ana County (DAC, the “County,” or the “Sponsor”), which is responsible for providing wastewater services in unserved, unincorporated areas of the county. The County has the authority granted under state laws §§4-36-10 NMSA 1978, 4-37-1 NMSA 1978, 3-18-22 NMSA 1978 and 3-26-01 et seq. 1978 NMSA 1978.

3. CERTIFICATION CRITERIA

3.1. Technical Criteria

3.1.1. General Community Profile

The new wastewater collection system connections will be located in an area commonly known as Sleepy Farms, within the unincorporated community of Vado in Doña Ana County. This area of the county is primarily agricultural, growing crops such as cotton, chiles, alfalfa, and pecans. There are also several large dairy producers near Vado.

As a small rural community, the census data for Vado is limited, and there is no specific data for the Sleepy Farms area. According to the U.S. census estimates for 2010, the population of Vado was nearly 3,200. The County is considered an economically distressed area where approximately 24.9% of the population, compared to about 18.2% of the state population, live below the poverty

level. The median household income (MHI) of Vado is estimated at US\$33,710, which is below the US\$39,164 MHI of the county and the US\$51,945 MHI for the state of New Mexico.³

The following table summarizes the status of public services and infrastructure in the Sponsor’s South Central service area, which includes Sleepy Farms and LS No. 7.

Table 1
BASIC PUBLIC SERVICES AND INFRASTRUCTURE

Water¹	
Coverage:	80%
Water supply source:	Groundwater wells
Number of hookups:	4,087
Wastewater Collection²	
Coverage:	54%
Number of connections:	2,742
Wastewater Treatment²	
Coverage:	100%
Treatment facilities:	South Central Wastewater Treatment Plant (WWTP)

¹ Water service in this area is provided by Lower Rio Grande Public Water Works or Los Altos de Flores.

² Source: Dona Ana County.

Local Water and Wastewater System

DAC provides sanitary sewer services to a total of 3,800 connections within the unincorporated areas of the county, of which about 98% are residential customers. In general, the County provides only wastewater collection and treatment services, while water is supplied by other private utilities, mutual domestic water associations or regional providers, such as Anthony Water and Sanitation District (AWSD) and the Lower Rio Grande Public Water Works Authority (LRGPWWA). The County currently maintains four wastewater treatment plants, just over 120 miles of collection lines and 29 lift stations. Its service area consists of three clusters: North Valley, South Central and Chaparral. Each area is about 60 miles from the other. The Project is located within the South Central service area.

The South Central area serves the communities of Brazito, La Mesa, San Miguel, Mesquite, Vado, Chamberino and Berino, which are located on either the east or west side of the Rio Grande River. Some residents have both water and sewer services, some have private wells and septic systems, others have water service but not sewer service. While DAC is the largest sewer service provider in this area, LRGPWWA is developing wastewater collection infrastructure in areas not served by the DAC system and sends those flows to the South Central Wastewater Treatment Plant (WWTP) operated by the County.

³ Sources: U.S. Census, QuickFacts, Doña Anan County, NM, <https://www.census.gov/quickfacts/fact/table/donaanacountynewmexico,NM/PST045219>; CensusViewer, Vado, NM, <http://censusviewer.com/city/NM/Vado>; and Citydata.com, Vado , NM, <http://www.city-data.com/city/Vado-New-Mexico.html>.

Currently, there are 30 homes in the Sleepy Farms area using on-site septic systems, which are failing due to substandard design and installation and experience surface pooling exacerbated by the high water table and low permeability of the soil in the area. This issue is especially acute during irrigation season and after rain events. DAC is proposing to build a sewer system for the homes in Sleepy Farms that will be connected to its existing wastewater collection infrastructure located approximately 5,000 feet to the west of the Sleep Farms community near LS No. 7, the primary lift station serving the South Central system. This lift station conveys approximately 75% of the wastewater flows from the service area to the South Central WWTP. To provide new service, deficiencies at LS No. 7 will need to be addressed as a second component of the Project. The force main from LS No. 7 to the WWTP has not presented any capacity issues or conditions requiring rehabilitation.

Because of these conditions, the Project was selected to receive grant funding from the Project Development Assistance Program (PDAP) and Border Environmental Infrastructure Fund (BEIF), both of which are funded by the U.S. Environmental Protection Agency (EPA) and managed by NADB. It has also received state funding administered by the New Mexico Environment Department (NMED).

All components of this Project will be owned and operated by DAC as part of its sanitary sewer system, and the wastewater collected by the new connections will be treated at its South Central WWTP, a sequencing batch reactor (SBR) activated sludge facility with a rated capacity of 1.05 million gallons per day (mgd). While the WWTP has sufficient capacity to handle the flows from the wastewater collection system, including those from the Sleepy Farms area, until recently, its overall capacity was nearly exhausted by the septage from on-site wastewater disposal systems located throughout the region. This situation had limited any significant effort to extend services to other unserved areas. However, in December 2020, the plant stopped receiving septage and will require improvements to re-engage those components of the WWTP impacted by the septage flows. An independent rehabilitation project, also funded by the State of New Mexico, includes upgrades to the sludge handling system, new headworks, new blowers, diffusers, new piping for the aeration system, and a new grit collector. Once the improvements are complete, the plant will have adequate capacity to serve the entire South Central Service Area. Implementation of the WWTP improvements is scheduled to begin in the second quarter of 2021 and be completed within 12 months.

3.1.2. Project Scope

The Project consists of the construction of wastewater collection system infrastructure for the Sleepy Farms area and includes the following components:

- *Sleepy Farms wastewater collection system (funded by NMED)*: Construction of a local lift station and installation of 5,000 linear feet of force main, 4,400 linear ft of 8-inch gravity sewer collection lines, manholes and a supervisory control and data acquisition (SCADA) system.

- Rehabilitation Lift Station No. 7 (funded with BEIF): Renovations to the existing wet well, including but not limited to disinfection, replacement of the variable frequency drive (VFD) pumps, reconfiguration of yard piping, concrete repairs and recoating of the existing wet well, site work, a shade structure, new electrical controls, and SCADA equipment.
- Sleepy Farms wastewater connections (funded with BEIF): Installation of 30 residential wastewater connections and decommissioning of existing on-site septic systems.

Figure 2 provides a schematic layout of the existing collection system infrastructure for the entire South Central service area and Figure 3 provides a schematic layout for the Project.

Figure 2
 SOUTH CENTRAL SERVICE AREA

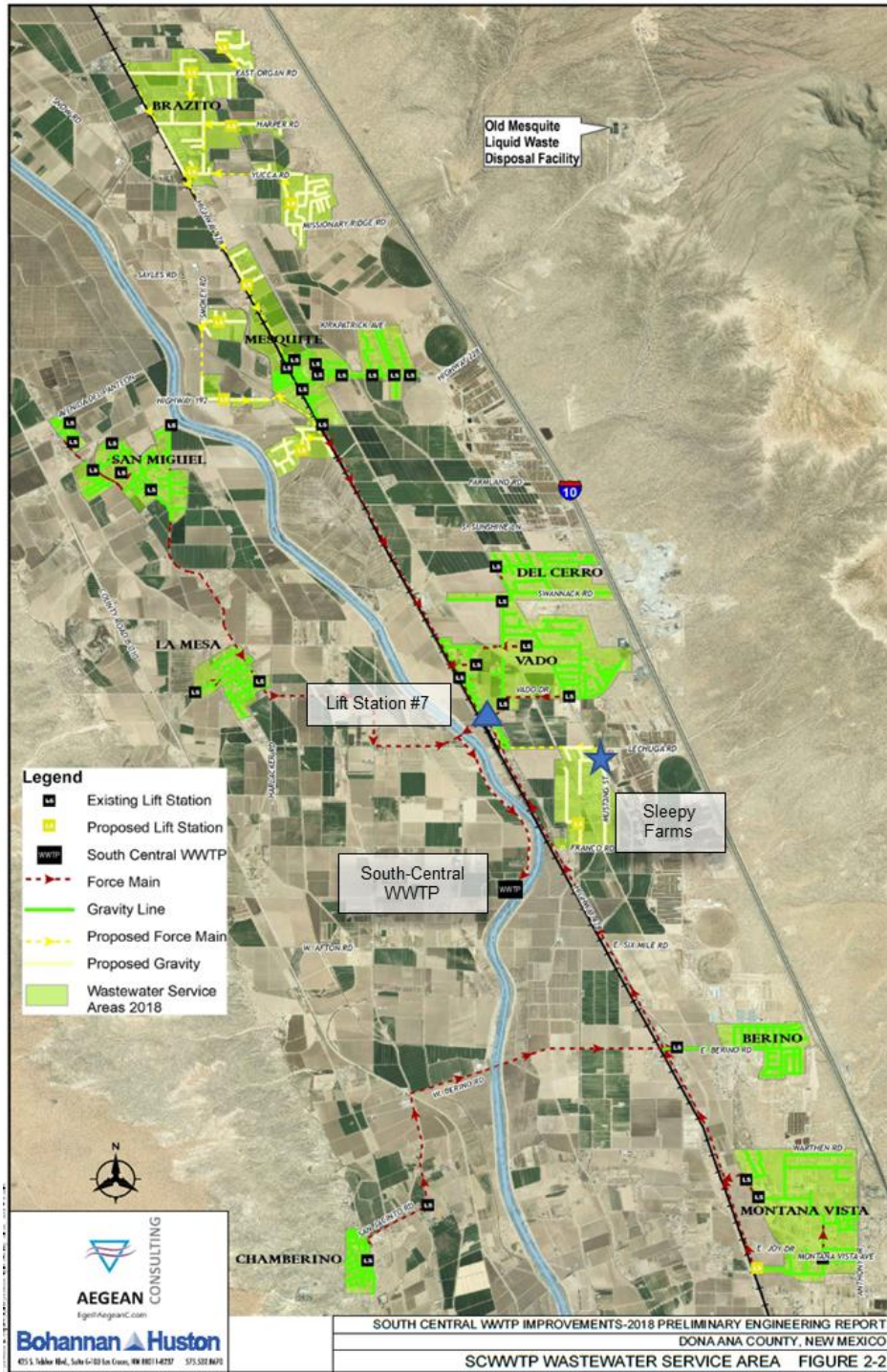
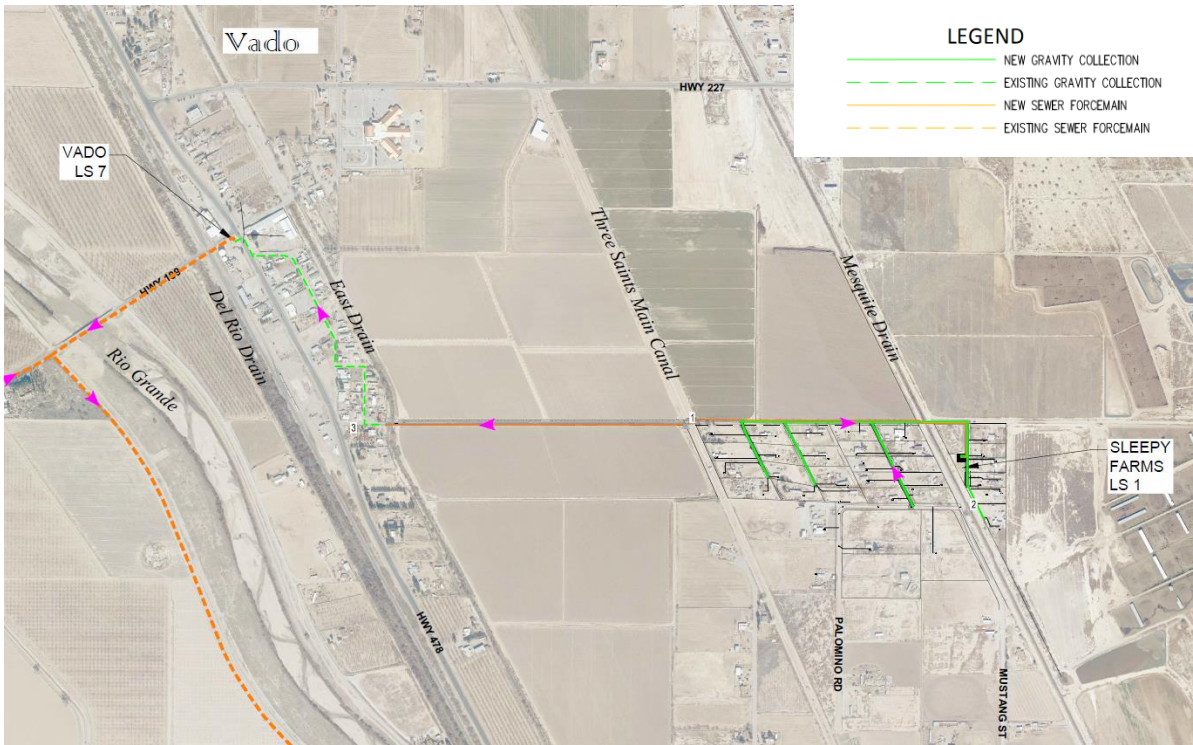


Figure 3
SLEEPY FARMS WASTEWATER COLLECTION SYSTEM LAYOUT

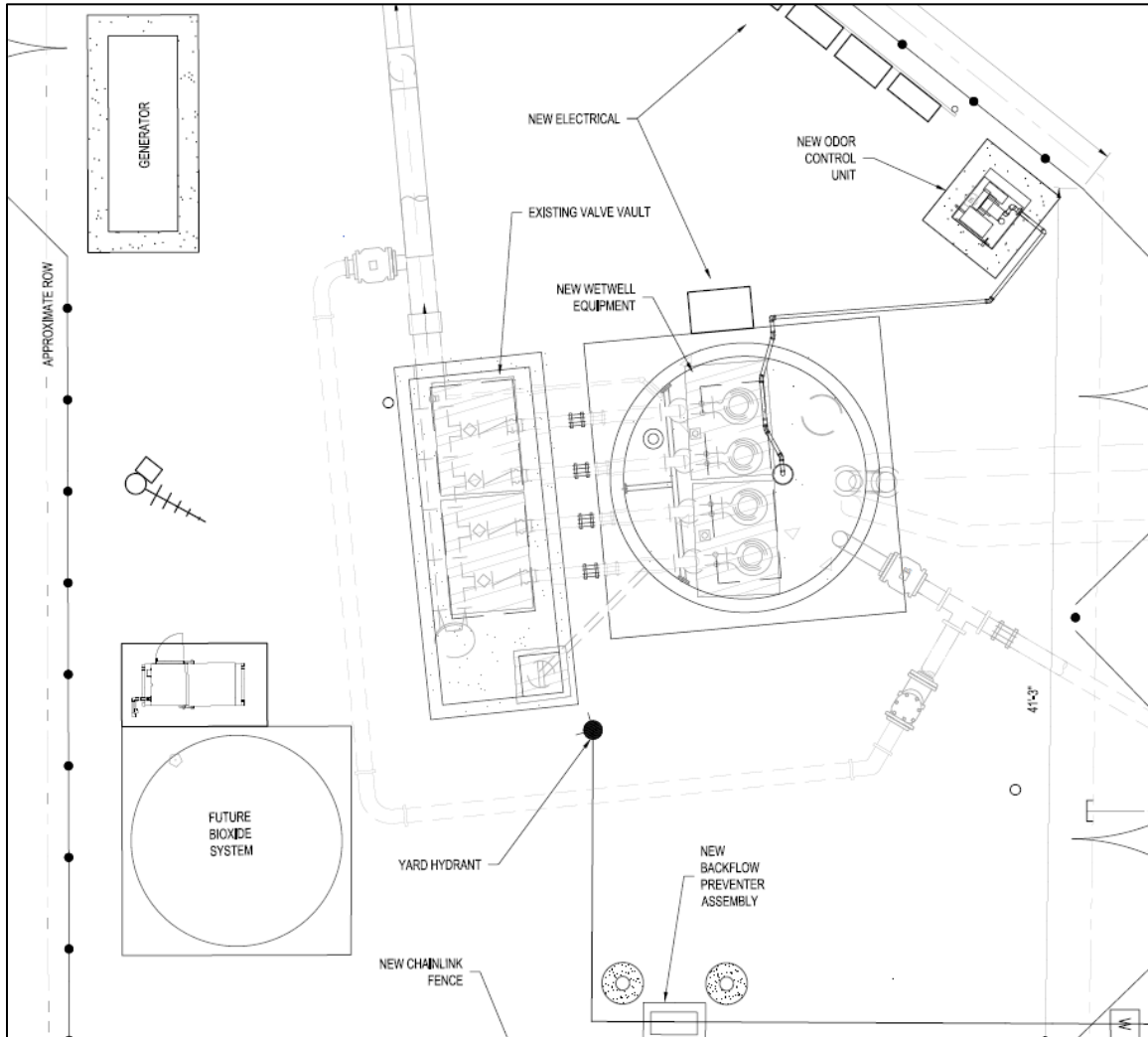


To provide services to the Sleepy Farms area, a gravity sewer system will be constructed in the community, and a small lift station with a force main will connect the new sewer system to DAC's existing infrastructure. Significant population growth is not expected in the area; thus, the new Sleepy Farms system has been sized for existing demand or about 9,400 gpd.⁴

Figure 4 shows the design layout for Lift Station No. 7.

⁴Based on the generally accepted industry design practices, anticipated flows have been calculated using 80 gallons per capita per day (gpd) for 30 homes.

Figure 4
LIFT STATION NO. 7 LAYOUT



Upgrades and rehabilitation work at LS No. 7 will provide regional benefits, by increasing capacity and efficiencies in its operation. The lift station currently receives wastewater from several communities in the South Central service area, including Montana Vista, Mesquite, Vado, Berino, Chamberino and Brazito. This component will benefit an estimated 2,080 connections, including the 30 new connections in the Sleepy Farms area, for a total benefited population of about 7,900 persons.

3.1.3. Technical Feasibility

A Preliminary Engineering Report (PER) for the Sleepy Farms wastewater collection system was completed in January 2018. The PER included an analysis of alternatives to determine the feasibility of providing wastewater collection services to Sleepy Farms.

The Sleepy Farms area consists of 78 parcels, but the Project area is limited to the 30 lots at the north end of the development. The lots in the Project area are between one acre and one and half acres in size. The remaining lots are much larger with some parcels exceeding 10 acres in size. The Project site does not include the areas with larger acreage because homeowners in those areas have not identified issues with their on-site septic systems.

During the Project's planning phase, issues with LS No. 7 emerged as a significant concern. The County reported that it requires constant maintenance and repairs. Issues with the lift station include extensive corrosion of the electrical conduit, valves, and the main electrical panel; deterioration of the wet well and yard piping; and overuse of pumps, which operate at or near capacity. LS No. 7 currently serves approximately 2,050 connections, receiving approximately 75% of the wastewater from the South Central service area. With the additional flows from the 30 new connections in the Project area, improving the operation of this key infrastructure component is critical.

The no-action alternative was rejected since it fails to address the contamination and health risks created by aging and failing on-site septic systems. Options such as developing a small package plant or using a vacuum collection system were considered, but rejected, since they would create significant operation and maintenance issues for the Sponsor, and the capital cost for their implementation did not provide significant benefits. Ultimately, the recommended solution is a system using gravity collection laterals that will discharge to a small lift station connected to existing DAC wastewater collection infrastructure near LS No. 7.

The design of the collection system placed the new infrastructure within existing roads, and the County purchased a parcel on Repollo Lane near Lechuga Road as the site of the new lift station. The collection laterals will be gravity lines, which is preferred since they have the lowest operation cost and the least maintenance. Conveying the wastewater from Sleepy Farms to LS No. 7 requires a small lift station and a force main, since the grades from Sleepy Farms to the existing DAC system are unfavorable for gravity flows. NMED reviewed the proposed design and determined that the Project will meet the technical standards established by the State of New Mexico.

Improvements to LS No. 7 will be a challenge since the lift station will have to be bypassed while the repairs and upgrades are being implemented. The Project plans and specifications provide detailed information for bypassing the lift station, demolition, sequencing the rehabilitation work and bringing the lift station back into operation. It is crucial that the work on LS No.7 be completed as quickly as possible. Additionally, the construction contractor must have the expertise to set up, operate, and maintain the lift station by-pass. The contractor will be required to have all necessary materials on hand and submit a work plan to the construction manager and design engineer prior to initiating work at the lift station.

3.1.4. Land Acquisition and Right-of-Way Requirements

The collection system for this Project will be constructed within public and private rights-of-way. The Sponsor owned and/or obtained easements along Lechuga, Mustang and Abanico roadways. Additionally, the County has access to sufficient rights-of-way along Cilantro and Berza, which are existing easements, not maintained by the County, but designated for road and utility installation. The new Sleepy Farms lift station will be constructed on the site purchased by DAC for this Project. Finally, all the work on LS No.7 will be done within the site owned by the County.

No additional land or right-of-way acquisition is required.

3.1.5. Project Milestones

The Project was selected through the PDAP/BEIF prioritization process in June 2018. Prior to its selection, a PER was completed in January 2018. An addendum to the PER was developed in September 2019 to support the work required on LS No. 7. Since this Project will be constructed in an area that is already disturbed, a Categorical Exclusion (CatEx) for the Project was issued by EPA on August 29, 2019. The Project's final design was completed in December 2020.

Procurement for construction of the collection system and rehabilitation of Lift Station No. 7 will be conducted separately; however, procurement for both construction projects is expected to begin during the third quarter of 2021. The construction of the entire Project is expected to take approximately 12 months.

Table 2 provides a summary of the Project milestones and their respective status.

Table 2
PROJECT MILESTONES

Key Milestones	Status
Environmental clearance – U.S.	Completed
Final design	Completed
Procurement – NMED and BEIF	To begin 3rd quarter of 2021
Construction period	Estimated 12 months

3.1.6. Management and Operation

Upon completion of this Project, DAC will own and operate the wastewater collection system for Sleepy Farms and rehabilitated Lift Station No. 7. The County has a high level of institutional capacity, which is supported by important tools such as an asset management plan and recent rate study. Its utility department operates an extensive collection system, including 29 lift stations, and four WWTPs ranging in size from 66,000 gpd to 1.0 mgd. Several components of the DAC system were certified and built with funding from BEIF.

The proposed Project is part of a larger initiative undertaken by the County to continue to address new service needs and remove substandard on-site wastewater disposal systems, as well as to implement other operation and maintenance improvements throughout its system. Rate adjustments were adopted on May 8, 2017; however, due to the economically distressed conditions of the residents served by the system, the ability to pay and collect is important to consider. Additionally, because DAC is not the water service provider, it does not have the ability to cut service for non-payment. The utility's collection efficiency is roughly 80%, compared to most utilities that operate at or above 95%.

As a supplement to the proposed Project and in parallel with the capital improvement investment, technical assistance funding has been offered to the County to assess its utility operations, including a review of the general operational and financial health of the utility, options to optimize its administrative and operational structure and steps to fully integrate the asset management tool to improve operation and maintenance practices. While the expansion of the collection system will not have a significant impact on the utility budget or resources of the Sponsor and improvements at LS No. 7 will support a more efficient and reliable operation of this critical infrastructure, the long-term sustainability of the utility will be supported by the strategies identified with the ancillary study.

3.2. Environmental Criteria

3.2.1. Environmental and Health Effects/Impacts

A. Existing Conditions

Currently, residents in the Sleepy Farms area do not have access to wastewater collection and treatment services. Area residents use on-site wastewater disposal systems, such as septic tanks, to manage their wastewater needs. Although most lots in the area are slightly larger than one acre, many systems do not meet current NMED requirements. Under current New Mexico regulations published in September 2013 (§20.07.3 NMAC), homes with two to three bedrooms have an estimated design flow of 1,000 gpd, which would require a lot size of 2.25 acres for a septic tank to be a feasible solution. In Sleepy Farms, most homes have at least two bedrooms and a few lots have multiple dwellings, resulting in an insufficient lot size for on-site wastewater disposal.

Soil conditions are another critical factor in the performance of septic systems. In the Project area, the soils are classified, by the U.S. Geological Survey, as Harkey and Glendale clay loams, which are notable for slow percolation rates. These clay soils impede the operation of the septic system, which is consistent with the surface pooling observed, especially during the irrigation season when water tables tend to be higher.

Surface pooling and overflows of untreated wastewater create a transmission pathway for pathogenic microorganisms associated with fecal matter that causes waterborne diseases in humans. An individual may become ill after contact with the contaminated water containing pathogens; eating uncooked foods that have had contact with contaminated water; or through

poor hygiene habits that contribute to the dissemination of diseases by direct or indirect human contact.

Table 3 shows waterborne disease statistics for Doña Ana County, New Mexico. The health statistics are statewide. Data specific to Doña Ana County is not available.

Table 3
WATERBORNE DISEASE STATISTICS FOR NEW MEXICO

Disease	Number of Cases/Year			
	2013	2014	2016	2017
Campylobacteriosis	16.5	18.0	25.1	37.5
E. Coli (STEC)	1.5	2.3	2.3	2.0
Giardiasis	4.8	4.8	3.9	3.8
Hepatitis A	1.0	0.4	0.2	0.2
Shigellosis	2.9	3.0	11.1	6.2

Source: New Mexico Department of Health, NMHealth.org, accessed 12.09.2020

- <https://www.nmhealth.org/data/view/infectious/2177/>
- <https://www.nmhealth.org/data/view/infectious/2030/>
- <https://prod.nmhealth.org/data/view/infectious/1856/>
- <https://www.nmhealth.org/data/view/infectious/1633/>

B. Project Impacts

The Project will prevent environmental deterioration by providing wastewater collection and treatment services in compliance with current wastewater regulations regarding discharges into receiving bodies of water. Wastewater will be collected and conveyed to DAC’s South Central WWTP for treatment, a facility that complies with all regulatory requirements. The Project will also decommission on-site septic systems, thereby eliminating the risk of groundwater contamination and reducing the health risks associated with exposure to untreated wastewater from malfunctioning systems.

Specifically, the Project is expected to generate environmental and human health benefits related to the following outcomes:

- Provide access to wastewater collection and treatment services for 30 homes by installing residential wastewater connections.
- Prevent potential groundwater contamination and human health risks from surface pooling by decommissioning at least 30 on-site systems.
- Eliminate approximately 9,400 gpd of untreated or inadequately treated wastewater.⁵
- Improve service for about 2,050 connections by increasing the reliability of LS No.7 and preventing the risk of up to approximately 400,000 gpd of untreated wastewater spills.

⁵ Based on generally accepted industry design practices, anticipated flows were calculated using 80 gallons per capita per day (gpd).

To enhance the benefits of the Project, all reasonable applications of green building practices, as defined by the EPA Border Water Infrastructure Program, were taken into consideration during the planning and final design phases. The collection system laterals have been designed for gravity flow, which eliminates the need for external energy inputs. Due to adverse topography, the trunk line from Sleepy Farms to the existing DAC collection system requires a lift station; however, the new lift station will be equipped with high efficiency pumps to minimize energy demands. The rehabilitation of the LS No. 7 will extend the life of existing infrastructure and will provide available capacity to address new service needs in the region.

C. Transboundary Impacts

The Project will protect the Hueco and Mesilla Bolsons, which are the main sources of drinking water for Doña Ana County, El Paso County and Ciudad Juarez. Since Vado is located approximately 28 miles from the U.S.-Mexico border, impacts from the Project are not likely to be observed in Mexico; however, it contributes to the regional efforts to protect and maintain the aquifers. The Project will slightly increase the volume of water discharging to the Rio Grande, but the quality of the discharge will not change.

No other transboundary impacts are anticipated for the Project.

3.2.2. Compliance with Applicable Environmental Laws and Regulations

The Clean Water Act (CWA) is the primary law regulating public wastewater systems. In accord with the CWA, all discharges are regulated through the EPA's National Pollutant Discharge Elimination System (NPDES). NMED monitors and inspects all point discharges to verify compliance with the requirements established in the utility's permit.

A. Environmental Clearance

Since the Project will be receiving federal funds, it is subject to the National Environmental Policy Act (NEPA) environmental clearance process (42 USC §§4321-4370f). To be eligible for funding from the U.S.-Mexico Border Water Infrastructure Program, all projects must obtain an environmental clearance decision. EPA Region 6 completed the environmental review and clearance process for this Project, in accordance with the regulations of the NEPA Council on Environmental Quality (Title 40 CFR §§1500.1-1508.28) and with EPA NEPA regulations (40 C.F.R. Part 6).

In compliance with NEPA, an Environment Information Document (EID) was developed. The EID addresses environment impacts resulting from the implementation of the Project. Specific areas addressed in the NEPA process include:

- Air quality, odors, and greenhouse gas emissions;
- Noise impacts;
- Water quality, hydrology, and floodplain impacts;
- Impacts to biological resources and wetlands;

- Impacts to cultural and historical resources;
- Impacts to the geology and soils;
- Impacts to municipal and public services;
- 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 and planning documents, EPA Region 6 prepared a Categorical Exclusion notice. After a 14-day public comment period, EPA issued the Categorical Exclusion on September 15, 2019, establishing that the Project will not result in any significant negative impacts to the environment in the U.S.-Mexico border area.

B. Mitigation Measures

The agencies that evaluated the Project determined that its implementation would not result in any significant negative impacts to the environment; therefore, no mitigation measures were established to address the negative environmental impacts that could be generated during the construction and operation of the Project. However, the Project design documents address potential temporary and minor environmental impacts that may arise, including the following:

- The local air basin may be temporarily impacted by carbon monoxide, nitrogen oxides and sulfur dioxide emissions released by vehicles and equipment used during construction.
- A temporary increase in dust emissions may be experienced due to the construction.
- Hazardous waste—such as used oil—may be generated during the construction phase.
- Surface water resources could be temporarily impacted by storm water runoff during the construction phase.
- Noise levels may be elevated during construction activities; however, this impact is short term and will be concentrated in the work area. Potential impacts also include temporary roadway blockages, as well as the presence of workers in the area.

Typical mitigation measures to be implemented include:

- Application of water to reduce the emission of dust particles and soil erosion;
- Construction to be scheduled between 8 a.m. and 5 p.m. to prevent extended disturbances from noise;
- Vehicle tune-ups to reduce emissions;
- Placement of warning signs to prevent potentially hazardous situations; and

- Hay bales or silt fences may be placed along rights of way to avoid contaminants to surface water resources.

By following these Best Management Practices, the temporary impacts due to construction will be minimized. Moreover, the long-term results from the implementation of the proposed Project will be positive overall.

C. Pending Environmental Tasks and Authorizations

There are no environmental authorizations pending.

3.3. Financial Criteria

The total estimated cost of the Project is US\$4,470,000 which includes funding for construction, supervision, and contingencies. The Sponsor requested a BEIF grant to support the implementation of the Project and improve the affordability of the investment. BEIF program criteria require that the proposed Project:

- address priority human health and environmental issues with community water infrastructure;
- provide a U.S.-side benefit;
- consider maximum funding from other sources;
- consider adequate operation and maintenance provisions;
- target improvements to water quality; and
- be implemented only in jurisdictions that aim to prevent developments that lack access to water and wastewater infrastructure.

Additionally, to determine eligibility for a BEIF grant, an affordability analysis is conducted to review the cost per household (CPH) for the new or improved utility service in comparison with the community's MHI, considering 100% loan financing and with the proposed grant allocation. The goal of the analysis is to have a CPH ratio of, at least, 1.7% of MHI for water and wastewater service fees. The higher the ratio, the less affordable the service becomes for community residents. For this Project, the proposed grant reduced the CPH/MHI ratio from 3.3% to about 3.0%, which includes the revenue requirements for funding the designated reserves.

Based on a thorough analysis of both the Project and the Sponsor, NADB has determined that the Project meets all BEIF program criteria and is recommending that the EPA approve a BEIF grant for up to US\$2,150,00, to cover the construction, supervision, and contingencies costs associated with the rehabilitation of LS No. 7 and the installation of the residential connections.

Table 4 shows a breakdown of the uses and sources of funding.

**Table 4
 USES AND SOURCES OF FUNDS**

Uses	Amount	%
Sleepy Farms Collection System (NMED)		
Construction	\$ 1,910,000	43.0
Construction management	200,000	4.0
Contingency	210,000	5.0
Lift Station No. 7/ Residential Connections (BEIF)		
Construction	1,690,000	38.0
Construction management	260,000	6.0
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TOTAL	\$ 4,470,000	100.0
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State of New Mexico Special Appropriation – NMED	\$ 2,320,000	52.0
NADB-BEIF (EPA grant)	2,150,000	48.0
TOTAL	\$ 4,470,000	100.0

* Estimated construction cost includes taxes.

The cost of building the wastewater collection system will be financed by a grant from the State of New Mexico and a grant through the BEIF program. The New Mexico funds represent 52% of the total cost of the Project, and the BEIF grant will cover the remaining 48% of the Project costs, allowing the County to maintain affordable user rates for the entire Project area.

4. PUBLIC ACCESS TO INFORMATION

4.1. Public Consultation

NADB published the draft certification proposal for a 30-day public comment period beginning April 9, 2021. The following Project documentation was available upon request:

- Vado Lift Station No. 7 Improvements Design, November 2020;
- Sleepy Farms Wastewater Collection System Design, October 2020;
- Sleepy Farms Community Wastewater Collection System -- Preliminary Engineering Report, January 2018;
- Environmental Information Document for Sleepy Farms, June 2019; and
- Categorical Exclusion for Doña Ana County South Central Wastewater Treatment System Rehabilitation Project, New Mexico Colonias Program, August 29, 2019.

The 30-day public comment period ended on May 9, 2021, with no comments received.

4.2. Outreach Activities

The County conducted outreach activities to obtain the support of the area residents for the Project, by providing information its scope, construction costs and resulting benefits. 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 were conducted as described in the Public Participation Plan (PPP).

The first public meeting was held on July 26, 2017 at the Del Cerro Community Center in Vado, New Mexico. Announcements for the meeting were posted at the Del Cerro Community Center and on the DAC website, 30-days prior to the meeting. Additionally, the meeting date was announced in the *Las Cruces Sun News* on June 11, 2017. This meeting was held in support of the NEPA process and was intended to give local residents an opportunity to learn more about the project, to ask questions, and to voice their support or opposition to the project.

A second public meeting will not be held due to COVID-19 precautions. In lieu of a second public meeting, Project information has been published on the DAC website, along with a survey to gauge the level of public support for the Project. The online information includes information about the Project's service area, construction costs, funding sources, potential disruptions, and connection information.

NADB also conducted a media search to identify potential public opinion about the Project. Below are links to the articles found, along with A brief description:

- *Construction Reporter*, May 8, 2019
<https://www.constructionreporter.com/news/dona-ana-county-gets-state-funding-for-anticipated-airport-project>
The article describes projects that have received grant funds from the State of New Mexico, including the Sleepy Farms project.
- *Las Cruces Sun News*, March 9, 2019
<https://www.lcsun-news.com/story/news/2019/04/09/governor-approves-68-million-projects-dona-ana-county/3415229002/>
The report lists appropriations of state funds for several projects in Doña Ana County including funds that will be used by DAC for the Sleepy Farms wastewater collection system extension project.
- *Las Cruces Sun-News*, June 6, 2017
<https://www.lcsun-news.com/story/news/local/county/2017/06/14/sleepy-farms-residents-get-help-septic-tank-woes/396983001/>
The article announced the award of US\$48,068 from the NADB technical assistance program to develop planning documents in support of the Project. It also described the existing conditions caused by poorly functioning on-site wastewater disposal systems in Sleepy Farms.

The activities carried out by the Project Sponsor and the media coverage described above demonstrate that the public received updates related to the Project, including its technical aspects, environmental effects, disruptions from construction, funding structure and financial impacts. The Project Sponsor informed NADB that no comments expressing concern about the Project have been received during the public outreach process. To date, no opposition to the Project has been identified.

5. RECOMMENDATION

Certification Criteria Compliance

The Project falls within the eligible sector of wastewater and is located in the border region, as required under the NADB Charter. The 30-day public comment period ended on May 9, 2021, with no comments received. The project review performed by the NADB Chief Environmental Officer confirms that the Project complies with all the certification requirements, and there are no pending activities required for compliance.

Funding Criteria Compliance

The Project Sponsor applied for funding through the U.S.-Mexico Border Water Infrastructure Program prioritization process and was selected for technical assistance through the Project Development Assistance Program (PDAP) and construction assistance through the Border Environment Infrastructure Fund (BEIF). The Project meets all BEIF program criteria, and the U.S. Environmental Protection Agency (EPA) is expected to approve a BEIF grant for up to US\$2,150,000 for its construction.

Accordingly, based on the foregoing conclusions as supported and presented in detail in this certification proposal, NADB hereby recommends the certification of the Project.