

September 19, 2014

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 New Mexico Environment Department Construction Programs Bureau has performed an environmental review of the following proposed action:

Effluent Reuse Filtration and Distribution Project
for the
City of Portales
located in
Portales, Roosevelt County, New Mexico

CWSRF Project Number: 023

Estimated Proposed Funding: \$6,882,975

CWSRF Loan: \$10,000,000

The City has been selected to receive a loan from the Clean Water State Revolving Loan Fund through the State of New Mexico Environment Department. The City was selected to receive funding for an effluent reuse project. The planning area associated with the Effluent Reuse Filtration and Distribution Project incorporates all of the City of Portales, the Country Club Golf Course area, the industrial area and the Portales Municipal Airport.

The proposed project consists of an effluent reuse filtration and distribution system to be used for supplying reclaimed wastewater to City facilities and other users within the City. The proposed pipeline installation for the effluent reuse distribution system would supply reclaimed wastewater users east of U.S. Highway 70 (U.S. 70), and to users west of U.S. 70. The reclaimed wastewater end user group may include the following list: the City's wastewater treatment facility, parks, the recreation complex and irrigation impoundment pond, the City cemetery, an old landfill site, the Industrial Park and expansion area, construction water within the City, fire hydrants throughout the City, Portales High School Portales Middle School, Portales Elementary School, Valencia Elementary School, James Elementary School, the Golf Course/Country Club, Eastern New Mexico University (ENMU) housing and campus landscaping, ENMU Recreational facilities, a future ENMU facility, and the Adkins Farms.

The need for an effluent reuse filtration and distribution system has become paramount for the city so it can decrease demand on the potable water supply. The City has been experiencing water shortages and an extreme demand on the city water supply due to severe drought conditions. The City of Portales will utilize Clean Water State Revolving Loan funds to finance the construction of the project.

The environmental review process, which is documented by the enclosed Environmental Assessment, indicates that no potential significant adverse environmental impacts will result

from the proposed action. The project individually, cumulatively over time, or in conjunction with other actions will not have a significant adverse effect on the quality of the environment. On the basis of the environmental review determination that there are no predicted or cumulative significant adverse impacts associated with the project, 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 supporting or disagreeing with my preliminary decision may be submitted for consideration to the attention of Andrea Pollock, Project Manager of the New Mexico Environment Department Construction Programs Bureau 5500 San Antonio Drive, Albuquerque, New Mexico 87109. After evaluating any comments received, the Construction Programs Bureau 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,



Jim Chiasson, PE
Bureau Chief, Construction Programs Bureau

cc: John DeSha, Public Utilities Director
City of Portales

Ryan Flynn, Cabinet Secretary
New Mexico Environment Department

Enclosure: Environmental Assessment

ENVIRONMENTAL ASSESSMENT

CONSTRUCTION OF EFFLUENT REUSE FILTRATION AND DISTRIBUTION SYSTEM for the CITY OF PORTALES located in ROOSEVELT COUNTY, NEW MEXICO

CWSRF Project Number: 023

BACKGROUND

The proposed construction project is located in the City of Portales, located in Roosevelt County, 240 miles southeast of Albuquerque, 90 miles northwest of Roswell and 100 miles northwest of Lubbock Texas. The area is shown on the map enclosed as Figure 1. The City of Portales has been selected to receive a loan funding package from the Clean Water State Revolving Loan Fund through the State of New Mexico Environment Department. The City was selected to receive funding to construct an effluent filtration and distribution project.

The City of Portales WWTP currently receives residential and commercial wastewater from the City itself and from commercial industries on the outskirts of the City. Presently, the plant receives and treats an average of about 1.15 million gallons per day (MGD). Treated effluent from the plant is discharged into an 80-acre Playa area located 1.5 miles to the southeast in Section 18, T2S, R35E. There is currently no effluent reuse system located in Portales. The proposed effluent filtration and distribution system is shown in Figure 2.

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.

PURPOSE AND NEED

The purpose of the proposed effluent reuse filtration and distribution system project is to provide the capacity needed by the City for future growth and the effluent quality needed for effluent reuse as irrigation water. A new effluent reuse filtration and distribution system needs to be installed so as to provide an effective source of irrigation water as a means of sustaining and protecting the future water resource. Portales will utilize Clean Water State Revolving Loan funds to finance the construction of the project.

PROJECT DESCRIPTION

The City of Portales proposed Effluent Reuse System will be designed to perform four primary functions related to the reuse of treated effluent: storage, disinfection, filtration and distribution. The Effluent Reuse System will consist of a new effluent storage pond, a new gas-

chlorination disinfection system, a new tertiary filtration system, a new reuse pump station, and a new reuse distribution system located throughout Portales. Existing Pond EFF will be rehabilitated into the new effluent reuse storage pond by making it 2.5' deeper and lining it with synthetic HDPE liner. Treated Effluent from the advanced extended aeration basins will flow by gravity directly into the effluent storage pond which will have approximately 11.4 MG of storage capacity, equal to 7 days of WWTP treated effluent production at full design flow. Algae growth will be inhibited in the storage pond by ultrasonic emitter equipment as well as relatively short hydraulic retention time. A new common-wall concrete basin-wet well structure will be constructed southwest of the effluent storage pond and connected to the pond by new piping. The gas-chlorination disinfection system will be installed in the front of the basin wet-well structure prior to two concrete filter basins that will house the two disc cloth filter units of the tertiary filtration system. Connected to the filter basins will be the wet well for the effluent reuse pump station. The pump building to house the controls and manifold piping of the pump station will be located above grade next to the wet well. The effluent reuse pump station will connect to the reuse distribution system and direct large volumes of pressurized flow to it.

The effluent reuse distribution system will consist of a large network of pressure pipes and a synthetically lined impoundment pond for irrigation. The reuse distribution pipes will range in size from 6" to 16" so as to provide the necessary flow to each irrigation site and will be connected to valve vaults at each site. The reuse distribution system will be designed as a looped system so as to more effectively maintain pressure in the piping. The overall effluent reuse system will be capable of supplying a total of 3000 GPM to the irrigation sites. (Figure 2)

To comply with discharge permit requirements and protect public safety, the new disinfection process must be able to create chlorine residual in both the irrigation distribution piping and the Playa discharge piping. Therefore, a new gas-chlorination disinfection system will be installed next to the wet well basin structure inlet channel so as to inject chlorine into the channel or inlet piping of the channel. The inlet channel will be designed to convey flow to the portion of the wet well that the new effluent reuse pump station will draw from and to also have overflow that connects to the Playa discharge piping. This configuration will allow chlorinated effluent to be either pumped to distribution for irrigation or to flow by gravity to the Playa at the discharge site, resulting in "One Point of Compliance" for monitoring the water quality of all effluent leaving the WWTP site.

ALTERNATIVES TO THE 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. Adherence to local, state and Federal regulations is of prime importance and concern to the funding recipient. Alternatives considered included No Action, several options rejected from further consideration, and implementation of the proposed project. A complete description of the alternatives is provided in the Environmental Information Document developed and provided by the funding recipient for the project.

- A. Alternative A: No Action Alternative: The NEPA environmental review process requires consideration of the "no action" alternative. The No Action Alternative would result in the city being unable to meet its commitment of supplying reclaimed wastewater users within the City with treated effluent. The No Action Alternative would result in not helping to address the City's water shortage demands and would not provide for conservation measures during time of drought. The environmental consequences of taking "no

action” would have a negative impact on land use, growth and population trends, ground water quality, air quality, socioeconomics, and public health and safety. They were compared with the benefits to be gained from the construction of the proposed project. Since taking “no action” is unresponsive to the current and future infrastructure needs of the funding recipient, and does not protect public health and environmental standards in the area, this alternative was **rejected** from further consideration in favor of implementing the proposed project.

B. Alternative 1: Preferred Action - Disc Cloth Filtration System Preferred Action

Alternative 1 uses cloth material to filter the influent water. Individual cloth disc filters are contained in larger filtration units that hold 7 disc filters and are housed in concrete basins. Influent water to be filtered is driven by gravity flow (from an elevation controlled by the high water level of the effluent storage pond) into the filter basins and through the cloth filters until the filtered effluent is conveyed out the bottom of the filter basins to pumps for distribution. The cloth fabric of each disc filter in each basin is continuously cleaned with an automatic backwash cycle. The backwash water is collected in troughs in each filter basin and removed from the basins by backwash pumps that send the backwash water to the WWTP influent lift station. The concrete tanks housing the two filter units of the system will be incorporated into a large common-wall concrete filter basin/wet well structure that is made up of an inlet channel (which directs flow to the filters or to the discharge area), two filter basins, one effluent channel and a wet well containing the distribution pumps. Alternative 1 was selected because it ranked highest among the Alternatives. Alternative 1 scored well on environmental impacts as it has good aesthetics and sustainability and very low energy consumption. The capital construction cost and overall annual O&M costs of Alternative 1 are the lowest of all the alternatives by very large amounts, resulting in the alternative being the best choice economically as well. For these reasons, this option was **selected** as the Preferred Action.

C. Alternative 2: Upflow Sand Filtration

This alternative is an Upflow Sand Filtration System that uses a group of fiber reinforced plastic (FRP) filter units filled with sand media to filter the influent water. To undergo filtration, the influent water is forced up through the sand media of each filter unit at a continuous flowrate driven by pressure from the high water level of the effluent storage pond. The sand media in the filter units is continuously circulated from the bottom of the units to the top of the units by air-lifts that are driven by a common, large air compressor. Once the fouled sand media from the bottom of the unit reaches the top of the unit it is washed into a wash box. Clean sand subsequently falls down from the wash box back into the media bed of each filter while the influent water is simultaneously forced through the sand and overflows from the top of each unit as filtered water to be conveyed to pumps for distribution. A continuous stream of reject water from the washing process is generated from each filter unit and sent to a small wet well from where it is pumped, via backwash pumps and associated piping to the WWTP influent lift station. This alternative was **rejected** from further consideration because it ranked lowest in safety and lower in ease of operation, sustainability, energy consumption, overall O&M costs, present worth cost, and technical feasibility.

D. Alternative 3: Modular Media Pressure Filtration System

This alternative is a system consisting of two types of advanced modular media filter units that operate under high pressure. To achieve very high levels of particle filtration, the system uses a first stage of filter units capable of removing particles 70 microns in size or larger combined in series with a second stage of filter units capable of removing

particles as small as 20 microns in size. The filter units of both stages are modules that contain advanced forms of synthetic filtration media. The media of the filter units are designed to trap particles from the water, as it is forced through the filter unit under significant pressure, by creating extremely small, retained spaces that the particles are too large to pass through. The media contained within the modules of the 70 micron first stage consist of rigid plastic discs that compress around an inner spine when put under pressure. The media contained within the modules of the 20 micron second stage consist of microfibers contained in cassettes. Once enough particulate matter has built up in the media of either filter type, the filters automatically perform a backwash cycle which removes the particulate matter in a waste stream that is conveyed back to the WWTP influent lift station by backwash piping. This alternative was **rejected** from further consideration because it ranked lower in ease of operation, sustainability, energy consumption, overall O&M costs, present worth cost, expandability, technical feasibility.

ENVIRONMENTAL SETTING

The City of Portales is located in Roosevelt County, New Mexico. It is located on the eastern plains of New Mexico, approximately 91 miles northeast of Roswell, NM, and roughly 17 miles southwest of Clovis, NM. This area is also known as the Llano Estacado. The Llano Estacado lies at the southern end of the High Plains section of the Great Plains of North America; it is part of what was once the Great American Desert. This geographic area stretches about 250 miles north to south, and 150 miles east to west, covering all or part of 33 Texas counties and four New Mexico Counties. The community is largely agricultural and cattle ranching and dairy farming are the major industries for this rural region.

There are three soil types located within the project planning area that are classified by the Natural Resources Conservation Service (NRCS) as prime farmland if irrigated: Clovis loam, 0% to 1% slope; Olton loam, 0% to 1% slope; and Stegall loam, 0% to 1% slope. The proposed installation would cross these soils within disturbed utility corridors, highway right-of-way, and/or a paved environment; the proposed project would not cross any fallow agricultural fields adjacent to the project corridor and there would be no conversion of farmland. The NRCS (2013) classifies the undisturbed soils in this areas composed of 12 soil types including the following: Amarillo fine sand, Amarillo loam, Arch loam, Arvana fine sandy loam, Blackwater loam, Drake soil, Gomez loamy fine sand, Olton loam, Portales fine sandy loam, Portales loam, Springer loamy fine sand, and Stegall loam. The biotic community found within the project area is predominantly plains and Great Basin Grassland. Buffalograss (*Bouteloua dactyloides*), blue (*B. gracilis*) and sideoats grama (*B. curtipendula*), little bluestem (*Schizachyrium scoparium*), and silver bluestem (*Bothriochloa saccharoides*) are the most common grassland species with this setting. Forbs include dalea (*Dalea Formosa*), scarlet globemallow (*Sphaeralcea coccinea*), sunflower (*Helianthus sp.*), and stiffstem flax (*Linum berlandieri*). Invasive shrub species include mesquite (*Prosopis sp.*) and narrowleaf yucca (*Yucca angustissima*). The proposed area also consists of sidewalks and adjacent properties, covered with pavement, bare dirt, gravel or ornamental plants used in landscaping private residences and businesses within the project area.

According to the 2010 Census, the City of Portales had a year 2010 population of 12,280 residents. This was an increase of 1149 residents from the 11,131 residents in the 2000 census. The median age of residents in the city is 27.3. Eastern New Mexico University (ENMU) is a large contributor to the economy and total population of the City and is included in the planning area for the WWTP.

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 should not have a substantial negative impact upon current land uses or land values, nor should it 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 local and state regulations.

The majority of the impacts associated with the proposed project will be short-term and temporary due to actual construction activities, and will cease immediately upon completion of construction work in any particular area. There are no significant adverse environmental impacts associated with the proposed action that cannot be reduced to acceptable levels. The only irretrievable resources committed to this 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: The proposed project was coordinated with the United States Fish and Wildlife Service and the New Mexico Department of Game and Fish concerning the protection of listed animal and plant species and their designated critical habitat. According to the New Mexico Department of Game and Fish, the selected contractor should include the following mitigation measures during construction of the proposed pipeline: minimize the number of open trenches, trench during cooler months, and avoid leaving trenches open at night. Additionally, should project activities be conducted during the breeding season of birds (March – September), then a pre-construction nesting bird survey needs to be conducted a minimum of 2 weeks prior to commencement of construction activities.

2. Cultural/Historic Resources: The proposed project was coordinated with the State Historic Preservation Officer (SHPO) as required under Section 106 of the National Historic Preservation Act (NHPA) concerning the protection of sensitive resources with archaeological, historical, architectural, or cultural significance. The cultural resource survey recorded 36 historic buildings within the NMDOT right-of-way built environment and four historic road segments (U.S. 70, NM 88, NM 18, and NM 267). One of the buildings (HCPI 32985) is recommended eligible for listing in the National Register of Historic Places (NRHP). The proposed project is not expected to impact HCPI 32985. The historic highways are recommended undetermined for listing in the NRHP. The project will result in no effect on any potential future eligibility to the NRHP. The proposed project will have no significant impact on the quality of the human or natural environment, either singularly or cumulatively.

A good faith effort of tribal consultation indicates that no impacts will occur. However, should materials, artifacts or properties of a potentially historic or archaeological nature be unearthed during construction, work will stop immediately in that general vicinity, and the funding recipient will immediately notify the SHPO of the discovery. Any such resources discovered will be evaluated in accordance with the requirements of 36 CFR Part 800. Appropriate mitigation measures will be developed and implemented, as needed, in consultation with the SHPO before construction is allowed to continue.

3. Floodplains: The proposed project was coordinated with the local Floodplain Administrator and the Federal Emergency Management Agency concerning the protection of the floodplain, and compliance with local floodplain management regulations. The project area occurs on the FIRM Community Panel number 3500540490E (FEMA 2010) for the City of Portales, New

Mexico. There are no anticipated impacts from the proposed project to floodplains.

4. Wetlands: The proposed project was coordinated with the United States Army Corps of Engineers concerning the protection of jurisdictional wetlands. Since these protected resources are not known to occur in the project area, a Section 404 permit will not be required and wetlands will not be adversely impacted by construction of the project.

5. Surface Water Resources: The proposed project was coordinated with both the National Park Service and the New Mexico Environment Department Surface Water Quality Bureau concerning the protection of surface water resources. The USEPA requires NPDES permit coverage for storm water discharges from construction projects that will result in one or more acres of total land area. This permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during and after construction to prevent, to the extent practicable, pollutants in storm water runoff from entering waters of the US.

6. Ground Water Resources: The proposed project was coordinated with the New Mexico Environment Department Ground Water Quality Bureau concerning the protection of ground water resources for compliance with the New Mexico Environment Department (NMED) groundwater discharge and effluent reuse requirements. Since the project would require ground disturbance to a maximum depth of approximately six feet, no impacts to local groundwater resources are anticipated from the proposed project. The proposed project would also help the city reduce ground water withdrawals by allowing the use of reclaimed wastewater for irrigation of public areas.

The NMED will require that the City of Portales obtain a Ground Water Discharge Permit for reuse of the effluent to ensure that the ground water quality is protected. The permit application includes requirements for a monitoring plan to ensure that ground water quality is protected.

7. Prime and Unique Farmlands: The proposed project was coordinated with the Natural Resources Conservation Service concerning the protection of prime and/or unique farmlands. The proposed project would not cross any fallow agricultural fields adjacent to the project corridor and there would be no conversion of farmland. Therefore, prime and/or unique farmlands will not be adversely impacted by construction of the project.

8. Air Quality: The project was coordinated with the New Mexico Environment Department Air Quality Bureau concerning the protection of air quality. The proposed project is located in an attainment area which is in compliance with the National Ambient Air Quality Standards (NAAQS) for all criteria air pollutants. All vehicles and equipment used in the construction of this project must comply with the regulations concerning control of air pollution from mobile sources. Long-term air quality impacts may include nuisance odors and hydrogen sulfide emissions associated with the treatment of wastewater.

9. Environmental Justice: The proposed project was reviewed for compliance with Executive Order 12898 entitled "Federal Actions to Address Environmental Justice (EJ) in Economically Stressed Populations". Potential environmental impacts to economically stressed communities were evaluated using Geographical Information System maps, census demographic data, and a mathematical formula to rank the project for EJ impacts. The project will serve all populations equally and will be constructed in a manner to ensure that no persons or populations will be discriminated against or denied the benefits of the project. There will be no adverse impacts that are considered disproportionate to any particular population(s). The results of the EJ analysis are shown in the enclosed figures 3, 4, 5, 6, 7, 8 and 9.

10. Coastal and Barrier Resource: Since the entire state of New Mexico is inland and not adjacent to any coastal location, construction of 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 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. To the contrary, improved infrastructure will have a positive environmental effect by enhancing public health, and protecting the local environment from continued contamination.

DOCUMENTATION, COORDINATION, AND PUBLIC PARTICIPATION

A public hearing for the proposed project was held on March 26, 2014, 5:30 PM, at the City Hall Council Chambers, located at 100 West 1st Street, Portales, NM. The purpose of the meeting was to inform the public of the proposed project, to identify any issues of concern, and to request public participation in the development of the project. Since the project is supported by the community, no adverse public comments or concerns were received.

During the process of conducting the environmental review and preparing this Environmental Assessment for the project, coordination has been conducted with all required resource protection agencies and offices to solicit and incorporate their initial review and comments, if any. Copies of this Environmental Assessment will be provided to those agencies and offices for their final review and comments, if any. Other interested parties may request a copy of the Environmental Assessment in writing from the New Mexico Environment Department Construction Programs Bureau, 5500 San Antonio Drive, Albuquerque, NM 87109.

References

1. Environmental Information Document, SWCA, July 2014
2. Preliminary Engineering Report – Amended, Smith Engineering, April 2014

RECOMMENDATION

Based upon completion of this Environmental Assessment, and a detailed review of the supporting information contained in the Environmental Information Document, the Public Hearing Responsiveness Summary and the Preliminary Engineering Report which were prepared for the project, and other pertinent technical, engineering and administrative documentation, the proposed project is considered to be cost-effective and environmentally sound. Therefore, it is recommended that a Finding of No Significant Impact be issued for this project.

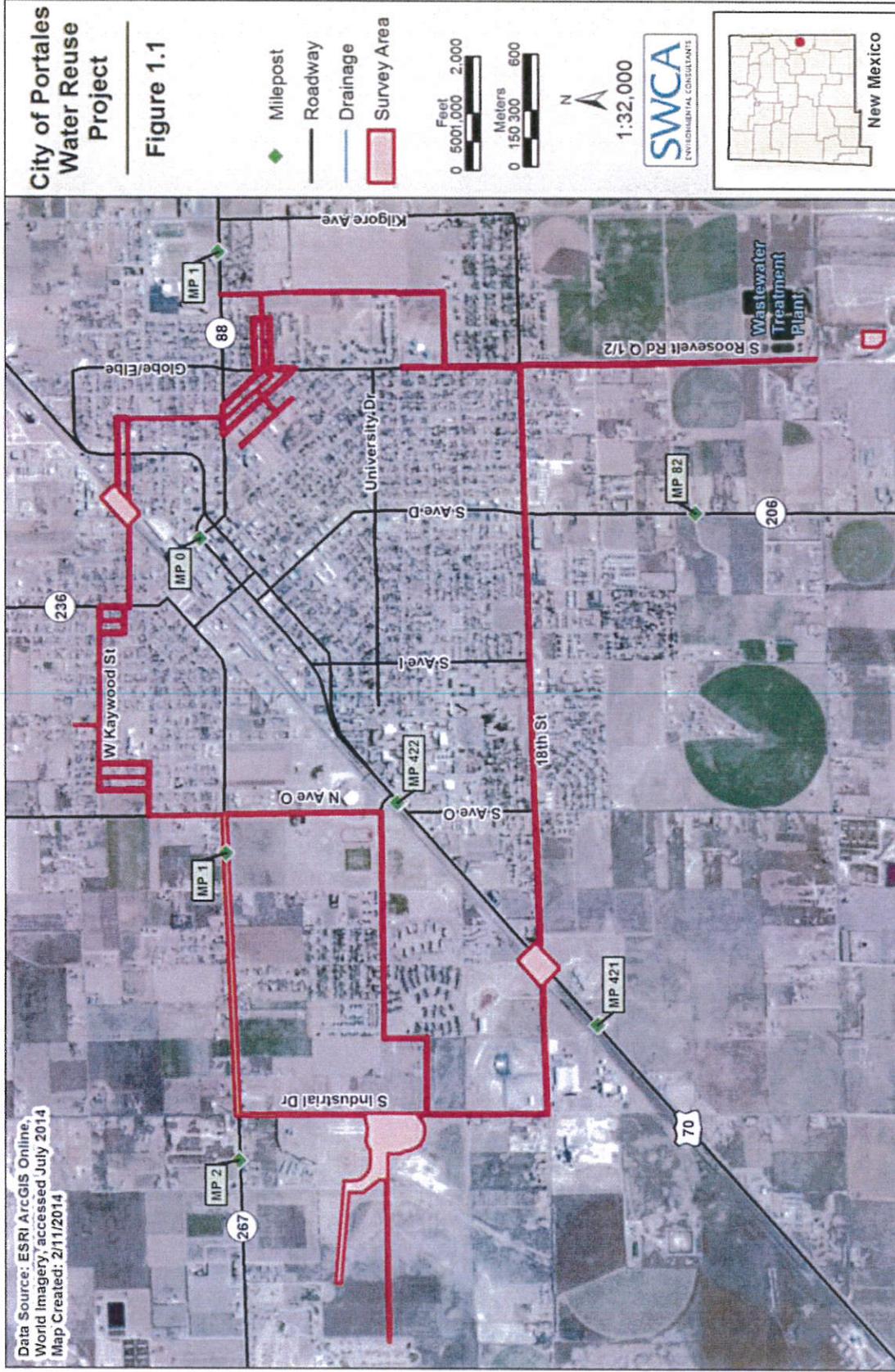


Figure 1.1. Project location map.

FIGURE 2



EJView Environmental Report



Location: -103.419800,34.141865,-103.419800,34.200095,-103.282814,34.200095,-103.282814,34.141865,-103.419800,34.

Study Area: 0.0 mile around the polygonal location

Sites and Facilities	Count
Air Facility System (AFS)	8
Superfund Sites (NPL)	0
Toxic Releases (TRI)	3
Hazardous Waste (RCRAInfo)	10
Water Dischargers (PCS & ICIS)	9
Brownfields (ACRES)	3
Radiation Information Database (RADInfo)	0
Toxic Substances Control Act (TSCA)	1

Environmental Concerns	Count
National Water Information System (NWIS) sites	0
STorage and RETrieval (STORET) sites	0
Impaired Streams	0
Impaired Waterbodies	0
National Parks	0

Places	Count
Schools	10
Hospitals	1
Worship Places	23

Data Note: Detail may not sum to totals due to rounding.

Source: Sites and facilities, EPA Envirofacts; NWIS, USGS; STORET, EPA; impaired streams and waterbodies, EPA NHD Plus; national parks, USGS National Atlas; schools, hospitals, and worship places; USGS GNIS.

FIGURE 3



EJView Census 2000 Summary Report



Location: -103.419800,34.141865,-103.419800,34.200095,-103.282814,34.200095,-103.282814,34.141865,-103.419800,34.

Study Area: 0.0 mile around the polygonal location

Summary	Census 2000
Population	1,396
Population Density (per sq. mile)	7
Minority Population	586
% Minority	42%
Households	494
Housing Units	567
Housing Units Built Before 1950	106
Land Area (m ²)	486,358,151
% Land Area	100%
Water Area (m ²)	2,221,566
% Water Area	0%

Population by Race	Number	Percent
Total	1,396	-----
Population Reporting One Race	1,359	97%
White	981	70%
Black	19	1%
American Indian	13	1%
Asian	4	0%
Pacific Islander	0	0%
Some Other Race	341	24%
Population Reporting Two or More Races	37	3%
Total Hispanic Population	548	39%

Population by Sex	Number	Percent
Male	673	48%
Female	723	52%

Population by Age	Number	Percent
Age 0-4	134	10%
Age 0-17	438	31%
Age 18+	957	69%
Age 65+	176	13%

Population by Place of Birth for the Foreign-Born	Number	Percent
Total	N/A	-----
Europe	N/A	N/A
Asia	N/A	N/A
Africa	N/A	N/A
Americas	N/A	N/A

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

Source: U.S. Census Bureau, Census 2000 Summary File 3.



EJView Census 2000 Summary Report



Location: -103.419800,34.141865,-103.419800,34.200095,-103.282814,34.200095,-103.282814,34.141865,-103.419800,34.141865

Study Area: 0.0 mile around the polygonal location

Population 25+ by Educational Attainment	Number	Percent
Total	827	-----
Less than 9th Grade	128	15%
9th - 12th Grade, No Diploma	138	17%
High School Graduate	209	25%
Some College, No Degree	179	22%
Associate Degree	33	4%
Bachelor's Degree or more	142	17%

Population Age 5+ Years by Ability to Speak English	Number	Percent
Total	1,279	-----
Speak only English	861	67%
Non-English at Home	417	33%
Speak English "very well"	254	20%
Speak English "well"	90	7%
Speak English "not well"	58	5%
Speak English "not at all"	16	1%
Speak English "less than well"	74	6%

Households by Household Income in 1999	Number	Percent
Household Income Base	494	-----
< \$15,000	150	30%
\$15,000 - \$25,000	90	18%
\$25,000 - \$50,000	141	29%
\$50,000 - \$75,000	66	13%
\$75,000 +	48	10%

Households by Tenure	Number	Percent
Total	494	-----
Owner Occupied	356	72%
Renter Occupied	138	28%

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2000 Summary File 3.

FIGURE 5



EJView Census 2010 Summary Report



Location: -103.419800,34.141865,-103.419800,34.200095,-103.282814,34.200095,-103.282814,34.141865,-103

Study Area: 0.0 mile around the polygonal location

Summary	Census 2010
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Population by Race	Number	Percent
Total	1,396	-----
Population Reporting One Race	1,359	97%
White	981	70%
Black	19	1%
American Indian	13	1%
Asian	4	0%
Pacific Islander	0	0%
Some Other Race	341	24%
Population Reporting Two or More Races	37	3%
Total Hispanic Population	548	39%
Total Non-Hispanic Population	1,072	60%
White Alone	1,020	57%
Black Alone	17	1%
American Indian Alone	12	1%
Non-Hispanic Asian Alone	6	0%
Pacific Islander Alone	0	0%
Other Race Alone	1	0%
Two or More Races Alone	16	1%

Population by Sex	Number	Percent
Male	673	48%
Female	723	52%

Population by Age	Number	Percent
Age 0-4	134	10%
Age 0-17	438	31%
Age 18+	957	69%
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Households by Tenure	Number	Percent
Total	494	
Owner Occupied	356	72%
Renter Occupied	138	28%

Data Note: Detail may not sum to totals dues to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, Census 2010 Summary File 1.

FIGURE 6

Health Statistics

Health Service Area for Curry, NM - Quay, NM

The health data statistics for this feature of the Environmental Justice Assessment are provided by the National Center for Health Statistics (NCHS) Centers for Disease Control (CDC) [\(EXIT Disclaimer\)](#), the official source for vital statistics. Currently, this information has not been released for all ethnic groups by NCHS. When the health statistics are released, they will be provided in this feature broken down by geographic area and ethnicity. This information will be made available as soon as the data have been quality assured and released by NCHS in their entirety.

Since 1960, NCHS has received several legislative mandates and authorities, and it works closely with other federal agencies, as well as researchers and academic institutions, to provide health information. NCHS data systems include data on vital events, as well as information on health status, lifestyle and exposure to unhealthy influences, the onset and diagnosis of illness and disability, and the use of health care. This information is used by policymakers in Congress and the Administration, by medical researchers, and by others in the health community.

Additional information is available from the National Center for Health Statistics (NCHS) [\(EXIT Disclaimer\)](#) website.

Statistic/Disease †	<u>Heart Disease</u>	<u>All Cancers</u>	<u>Chronic Obstructive Pulmonary Disease</u>	<u>Pneumonia and Influenza</u>	<u>Liver Disease</u>
White Male Rate *	188.8	157.6	36.7	23.1	15.8
White Male Significance **	3	3	4	5	3
Black Male Rate *	214.4	101.6	60.7	0	85.7
Black Male Significance **	3	2	5	1	5
White Female Rate *	108.6	96.7	15.9	14.3	3.8
White Female Significance **	3	3	3	3	3
Black Female Rate *	147.4	85.2	25.2	21	69.3
Black Female Significance **	3	2	5	5	3

SOURCE: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, Atlas of United States Mortality (1997) [\(EXIT Disclaimer\)](#)

† Rates based on deaths during 1988-92 in the United States due to the diseases listed.

* Rate: The age-adjusted death rate due to cause per 100,000 population.

** Significance: A description of whether the death rate of the group, due to cause, varies significantly from the U.S. death rate.

2005 NATA Risk Estimates

	Cancer Risk (Persons per Million)	Neurological Hazard Risk	Respiratory Hazard Risk
ROOSEVELT, NM	20.12 (20.3 Percentile)	.02 (36 Percentile)	.44 (23.1 Percentile)

FIGURE 7

New Mexico	27.84 (13.5 Percentile)	.03 (9.6 Percentile)	.89 (15.4 Percentile)
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SOURCE: EPA Office of Air and Radiation (<http://www.epa.gov/tox/atw/nata2005/>)
 NOTES: Values are derived from 2005 National-Scale Air Toxics Assessment (NATA) Cancer Risk Estimates and Non-Cancer Hazard Index Scores. Percentiles are ranking of Counties and States from 0 (lowest) to 100 (highest).

2007 Asthma Prevalence By State

	White Non-Hispanic Persons	Black Non-Hispanic Persons	Multi-Racial Non-Hispanic Persons	Other Race Non-Hispanic Persons	Hispanic Persons
New Mexico					
Lifetime	15.3%	30.4%	8.7%	13.1%	11.8%
Current	9.9%	9.8%	6.2%	4.9%	7.7%

SOURCE: Centers for Disease Control and Prevention.
 2007 Behavioral Risk Factor Surveillance System (BRFSS) (<http://www.cdc.gov/asthma/brfss/07/brfssdata.htm>)

2008 Mortality Rates

	Deaths per 1000
ROOSEVELT, NM	7.58
New Mexico	7.84

SOURCE: US Census Bureau <http://www.census.gov/popest/>
 NOTES: Mortality rates are calculated using 7/1/2007 to 7/1/2008 deaths and estimated populations from the file, "County Population Estimates and Estimated Components of Change, April 1, 2000 to July 1, 2008".

Life Expectancy at Birth in 1999

	Male and Female	Male	Female
Roosevelt, New Mexico *	77	73.5	80.8

SOURCE: U.S. Census Bureau & National Center for Health Statistics

* Combined County: Life expectancy average was calculated using one or more other adjacent counties

All Cancers Mortality Rates

	1950 - 1994		1970 - 1994							
	White Male Age 0 - 19	White Female Age 0 - 19	All White Male	All White Female	All Black Male	All Black Female	White Male Age 0 - 19	White Female Age 0 - 19	Black Male Age 0 - 19	Black Female Age 0 - 19
ROOSEVELT, NM	2.1298	3.9262	181.9383	109.6299	535.78	0				
New Mexico	6.3915	4.906	176.2282	123.6238	232.7052	133.5843	5.3343	3.8159	4.0466	2.1414

SOURCE: National Cancer Institute Cancer Mortality Maps & Graphs <http://ratecalc.cancer.gov/ratecalc/archivedatlas/>
 NOTES: Mortality rates (number per 100,000) are extracted from the state and county mortality tables.

Childhood Leukemia Mortality Rates

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FIGURE 8

	1950 - 1994				1970 - 1994					
	White Male Age 0 - 19	White Female Age 0 - 19	All White Male	All White Female	All Black Male	All Black Female	White Male Age 0 - 19	White Female Age 0 - 19	Black Male Age 0 - 19	Black Female Age 0 - 19
ROOSEVELT, NM	0	2.4845	6.2044	4.809	0	0				
New Mexico	2.7781	2.2246	7.9332	4.7406	7.1348	1.8582	2.1673	1.595	0	2.1414

SOURCE: National Cancer Institute Cancer Mortality Maps & Graphs <http://ratecalc.cancer.gov/ratecalc/archivedatlas/>
 NOTES: Mortality rates (number per 100,000) are extracted from the state and county Leukemia mortality tables.

Adult Lymphoma Mortality Rates

	1950 - 1994				1970 - 1994							
	White Male Age 20 - 49 Age 50 - 74 Age 75+	White Female Age 20 - 49 Age 50 - 74 Age 75+	All White Male	All White Female	All Black Male	All Black Female	White Male Age 20 - 49 Age 50 - 74 Age 75+	White Female Age 20 - 49 Age 50 - 74 Age 75+	Black Male Age 20 - 49 Age 50 - 74 Age 75+	Black Female Age 20 - 49 Age 50 - 74 Age 75+		
ROOSEVELT, NM	.7518 15.5608 60.9953	0 4.9776 44.9167	7.0598	2.4981	0	0						
New Mexico	1.7706 13.014 38.6452	.9276 9.7311 34.1661	5.5021	3.978	5.3146	3.6743	1.9204 13.7231 45.4862	.9477 10.506 36.919	0 21.4833 15.0658	1.6494 12.6926 11.2438		

SOURCE: National Cancer Institute Cancer Mortality Maps & Graphs <http://ratecalc.cancer.gov/ratecalc/archivedatlas/>
 NOTES: Mortality rates (number per 100,000) are extracted from the state and county Non-Hodgkin's Lymphoma mortality tables.

Lung Cancers Mortality Rates

	1950 - 1994				1970 - 1994					
	White Male Age 0 - 19	White Female Age 0 - 19	All White Male	All White Female	All Black Male	All Black Female	White Male Age 0 - 19	White Female Age 0 - 19	Black Male Age 0 - 19	Black Female Age 0 - 19
ROOSEVELT, NM	0	0	48.5616	10.6169	0	0				
New Mexico	.0242	.0558	49.4622	20.1564	69.9306	19.8963	.0202	.0782	0	0

SOURCE: National Cancer Institute Cancer Mortality Maps & Graphs <http://ratecalc.cancer.gov/ratecalc/archivedatlas/>
 NOTES: Mortality rates (number per 100,000) are extracted from the state and county mortality tables.

FIGURE 9