



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS TEXAS 75202-2733

April 11, 1998

FINDING OF NO SIGNIFICANT IMPACT

To Interested Agencies, Officials, Public Groups and Individuals,

The U.S. Environmental Protection Agency (EPA) has performed an environmental assessment in accordance with the procedures at 40 CFR Part 6, "*Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act,*" for the following proposed action:

Proposed Action: Awarding of U.S. Environmental Protection Agency grant funds from the Border Environmental Infrastructure Fund to the Lower Valley Water District for construction of a conventional gravity wastewater collection system.

Applicant: The Lower Valley Water District (formerly the El Paso County Lower Valley Water District Authority), Town of Socorro, El Paso County, TX

Total Project Cost:	\$ 93,178,202.00
Estimated EPA CWTAP Grant Share:	\$ 24,266,358.00
Estimated EDAP Grant Share:	\$ 33,519,281.00
Estimated EDAP Loan Share:	\$ 4,636,798.00
Estimated SRF Loan Share:	\$ 3,435,000.00
Estimated WSA Loan Share:	\$ 5,210,000.00

(Remaining project costs may be funded by grants or loans. Specific funding amounts are unknown at this time).

Proposed Project. The Lower Valley Water District (LVWD) provides water and sewer services to an area known as the Lower Valley, situated generally south and downstream along the Rio Grande from the city of El Paso, east of the river and west of Interstate Highway 10. The LVWD is divided into two planning areas: Socorro, which includes the northern portion centered around the historic community of Socorro; and San Elizario, which includes the southern part and is comprised of clusters of subdivisions surrounding the historic community of San Elizario.

The Socorro-San Elizario area has experienced uncontrolled development of numerous substandard residential subdivisions, or "colonias." These colonias were not provided with adequate water supply or wastewater disposal facilities. In the last several years, the LVWD has been working to provide the most economical financial assistance for its constituents with properly designed and constructed water and sewer systems. The LVWD is proposing to

construct a conventional gravity wastewater collection system in Socorro and has applied for EPA grant funds. The LVWD will transport the wastewater from its planning areas to the R.R. Bustamante Wastewater Treatment Plant, which is operated by the El Paso Water Utilities Public Service Board (PSB), and which currently has the capacity to treat the projected flows from the planning area through the year 2015.

The LVWD has also been considering the construction of an innovative, alternative artificial wetlands wastewater treatment facility which will serve one subdivision known as Las Azaleas in the San Elizario planning area. However, due to scheduling issues, it appears that the no action alternative will be selected for the Las Azaleas project since the sewer system for that subdivision can be connected to the regional sewer system serving the entire San Elizario, Socorro area.

Finding. The EPA has reviewed the Environmental Assessments (EAs) prepared by the Texas Water Development Board (TWDB) for the LVWD's Socorro project proposed funding through the State Water Pollution Control Revolving Fund (SRF), the Colonia Wastewater Treatment Assistance Program (CWTAP), and the Economically Distressed Areas Program (EDAP), all administered by the TWDB. The EPA concurs with the TWDB's Findings of No Significant Impact (FNSI) issued on June 11, 1990, amended on December 8, 1993, and re-issued on December 10, 1993, for the San Elizario portion of the LVWD's sewer system. The FNSI was amended on January 12, 1996, to address changes in the Socorro/San Elizario sewer system project that occurred since December 1993. The water supply side of the District's water and sewer project has been addressed in a EA/FNSI issued on March 14, 1990, by the U.S. Department of Interior, Bureau of Reclamation. No new factors or issues have been introduced into the proposed action to alter the finding or to require an increase to the scope of the assessment.

On the basis of this EA, the Regional Administrator has determined that awarding of grant funds to assist the LVWD project will not result in significant adverse impacts on the human environment and that an Environmental Impact Statement (EIS) is not warranted. Comments regarding this determination not to prepare an EIS will be accepted during the thirty (30) day period following the public notice of this FNSI. Address all comments and requests for review of the administrative record supporting this determination to:

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**ENVIRONMENTAL ASSESSMENT
FOR THE AWARDING OF
U.S. ENVIRONMENTAL PROTECTION AGENCY
GRANT FUNDS
FROM THE BORDER ENVIRONMENTAL INFRASTRUCTURE FUND
TO CONSTRUCT A WASTEWATER COLLECTION SYSTEM
FOR THE LOWER VALLEY WATER DISTRICT
TOWN OF SOCORRO, EL PASO COUNTY, TEXAS**

United States Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202

Approved: /S/ _____ 3/23/98
Jerry Clifford Date
Acting Regional Administrator

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1.0 PURPOSE AND NEED FOR ACTION

1.1 General Information.

Proposed Action: Awarding of U.S. Environmental Protection Agency grant funds from the Border Environmental Infrastructure Fund to the Lower Valley Water District for construction of a conventional gravity wastewater collection system.

Applicant: The Lower Valley Water District (formerly the El Paso County Lower Valley Water District Authority), Town of Socorro, El Paso County, TX

Table with 2 columns: Description and Amount. Rows include Total Project Cost, Estimated EPA CWTAP Grant Share, Estimated EDAP Grant Share, Estimated EDAP Loan Share, Estimated SRF Loan Share, and Estimated WSA Loan Share.

(Remaining project costs may be funded by grants or loans. Specific funding amounts are unknown at this time).

1.2 Proposed Project. The Lower Valley Water District (LVWD) provides water and sewer services to an area known as the Lower Valley, situated generally south and downstream along the Rio Grande from the city of El Paso, east of the river and west of Interstate Highway 10. The LVWD is divided into two planning areas: Socorro, which includes the northern portion centered around the historic community of Socorro; and San Elizario, which includes the southern part and is comprised of clusters of subdivisions surrounding the historic community of San Elizario.

The Socorro-San Elizario area has experienced uncontrolled development of numerous substandard residential subdivisions, or "colonias." These colonias were not provided with adequate water supply or wastewater disposal facilities. In the last several years, the LVWD has been working to provide the most economical financial assistance for its constituents with properly designed and constructed water and sewer systems. The LVWD is proposing to construct a conventional gravity wastewater collection system in Socorro and has applied for EPA grant funds. The LVWD will transport the wastewater from its planning areas to the R.R. Bustamante Wastewater Treatment Plant (WWTP), which is operated by the El Paso Water Utilities Public Service Board (PSB), and currently has the capacity to treat the projected flows from the planning area through the year 2015.

1.3 Recommendation. The EPA has performed an environmental review of the Environmental Assessments (EAs) prepared by the Texas Water Development Board (TWDB) for the LVWD's Socorro project proposed to be funded through the State Water Pollution Control Revolving Fund (SRF), Colonia Wastewater Treatment Assistance Program (CWTAP), and Economically Distressed Areas Program (EDAP), all administered by the TWDB. The EPA concurs with the Finding of No Significant Impact (FNSI) prepared by the TWDB for the San Elizario portion of the LVWD's sewer service. The FNSI was issued on June 11, 1990, and issued again on December 10, 1993. It was amended further on January 12, 1996, to address the changes in the Socorro/San Elizario sewer system project that occurred since December 1993. The water supply aspect of the water and sewer project was addressed in a EA/FNSI issued on March 14, 1990, by the U.S. Department of Interior, Bureau of Reclamation. No new factors or issues have been introduced into the proposed action to alter the finding or to require an increase to the scope of the assessment.

The proposed project is consistent with the EPA-approved Water Quality Management Plan (WQMP). On the basis of this EA, the Regional Administrator has determined that awarding of grant funds to assist the funding of this project will not result in significant adverse impacts on the human environment and that an Environmental Impact Statement (EIS) is not warranted. The present EA/FNSI are predicated on the findings as described in the TWDB's 1990, 1993 and 1996 findings and the conditions of those documents remain in effect.

2.0 ALTERNATIVES.

2.1 Alternatives Available to the EPA.

Approve the Grant Funding for the Project as Proposed. EPA can recommend approval of the grant funding for the proposed purpose.

Grant Funding of a Modified Project. Information received during the EA process could result in the identification of significant adverse impacts that require modification. Modification of the project to mitigate the impacts could allow the EPA to accept the project as modified and recommend approval of the grant funding.

No Action. A determination that the project as proposed could result in potentially significant adverse impacts to the environment that cannot be satisfactorily mitigated would preclude a recommendation of approval of the grant funding. An EIS would then be recommended to evaluate the potentially significant impacts. The EIS process includes a scoping meeting to identify critical facts and issues, a Draft EIS, a public comment period on the Draft EIS, a public hearing on the Draft EIS, the Final EIS, a public comment period on the Final EIS, and a Record of Decision.

2.2 Alternatives Considered by the Applicant.

Selected Alternative. The selected alternative is to construct a wastewater collection system and interceptors to transport the flows to the WWTP. The alternative makes the best use of existing facilities, is the most cost-effective, and is amenable to integration into any future regional system.

As originally proposed, the sewerage system project involved the installation of 456,690 linear feet of collectors, interceptors and force mains, and 12 lift stations. After the initial facilities plan for the Socorro/San Elizario project was completed, it was determined that it would be more practical to route major sewer interceptors along agricultural drains instead of roadways. Also, the LVWD was granted a State Design Criteria variance so that sewer lines could be placed at a reduced grade to reduce problems with high groundwater tables. The revised sewer project involves the installation of approximately 518,800 linear feet of pipeline, ranging in size from 8-inch to 42-inch. There are approximately 1,970 manholes and the number of lift stations has been reduced from 12 to 6. The amended project also calls for the installation of a metering station at the WWTP.

The collection system's design is based upon a projected Socorro planning area population of 59,257 and a projected population of 70,559 for the entire Socorro/San Elizario planning area by the year 2015. Design flows for the proposed Socorro service area will increase from the current estimated 2.9 million gallons per day (MGD) to 6.0 MGD by the year 2015. The LVWD proposes to transport the wastewater from its planning areas to the WWTP, which currently has enough capacity to treat the projected flows from the planning areas through the year 2015.

Upgrading and Treatment and Reuse. Because Socorro is unsewered and has an arid climate, a wide variety of alternatives were available for analysis, many of which were developed through a regional planning grant from the TWDB. Upgrading existing on-site systems was rejected because of environmental constraints and small lot sizes. Small, alternative wastewater systems were deemed impractical because of the expected flows and costs. Treatment and reuse was rejected because of the lack of potential users in the area and the cost of the higher degree of treatment required. As the wastewater is presently discharged to an irrigation canal, agricultural reuse will occur.

Construction of Decentralized Systems. Nine separate alternatives were evaluated, ranging from having the city of El Paso extend wastewater collection to the area, constructing one or more regional treatment plants at any of several locations, and constructing several decentralized treatment plants. Variables within these alternatives included discharge and disposal by rapid infiltration, the latter of which was rejected due to the costs of pumping the effluent to a suitable location. Staging the facilities would not be cost-effective.

Innovative alternatives. The LVWD has also been considering the construction of an innovative/alternative artificial wetlands wastewater treatment facility which will serve one subdivision known as Las Azaleas in the San Elizario planning area. However, due to scheduling issues, it appears that the no action alternative will be selected for the Las Azaleas project since the sewer system for that subdivision can be connected to the regional sewer system serving the entire San Elizario/Socorro area.

No Action. This alternative was not selected given the potential human health and safety problems and the consequences to the environment in terms of pollution.

3.0 AFFECTED ENVIRONMENT AND PREDICTED ENVIRONMENTAL IMPACTS

3.1 Land Resources.

Land Use Changes. Potential adverse secondary impacts are difficult to quantify and can only be put into perspective by considering the impacts without the project. As a result of this sewer system project and when considered in conjunction with the water supply project, the nature of the Socorro planning area's future development will be altered. The rate of population growth reflects the past rate of growth and this project will probably do little to change it. What will be altered is the density of development and perhaps the rate of development, as a wastewater system will allow for smaller lot sizes and the ability to build more structures in a shorter time. Availability of these utilities will also make the community a more desirable place to live and will probably raise property values.

Transportation. Major sewer interceptors will be routed along agricultural drains instead of roadways. Construction will be done in conformance with Occupational Safety and Health Administration (OSHA) standards.

Noise. The system should produce a minimum of noise and odor with proper operation and maintenance.

3.2 Water Resources. The plant's National Pollutant Discharge Elimination System (NPDES) permit limits the discharge of treated effluent to an effluent quality of 20 milligrams per liter (mg/l) of Biological Oxygen Demand (BOD) and 20 mg/l Total Suspended Solids (TSS) for discharge into the Riverside Canal, or the Riverside Interceptor Drain, to stream segment 2307 of the Rio Grande Basin. This discharge is consistent with the appropriate State water quality standards and the EPA approved State WQMP. Normally, none of the effluent reaches the river as the canals are part of the regional irrigation system. Sludge produced by the facility is deposited in a State permitted sludge-only landfill.

The population and flow projections used in facilities planning for the project have been approved by the Texas Natural Resource Conservation Commission (TNRCC), the State Water

Quality Management Agency, and will be included in an update to the WQMP. The LVWD is in the process of becoming designated as the official waste management agency in the WQMP for wastewater collection in the San Elizario and Socorro facilities planning areas. The El Paso PSB is becoming the designated management agency for wastewater treatment for the Socorro planning area. These designations are not expected to become controversial and will be incorporated into an update to the WQMP.

The presence of shallow ground water will require dewatering of construction trenches, particularly in those areas closest to the river. If water service is not available to residents of these areas at the time of sewage system construction, then residents will be notified of potential problems with their wells and provided an alternate source of water. Otherwise, the project will not affect ground water quantity or quality, except to eliminate on-site sewage disposal systems as sources of ground water contamination.

3.3 Air Quality.

The planning areas is a non-attainment area under the National Ambient Air Quality Standards for ozone, carbon monoxide, lead and particulate. Dust from construction will be controlled by watering. No blasting will be required.

3.4 Biotic Resources.

Biotic Changes. All disturbed areas will be returned to the original contour and revegetated, as necessary, immediately following construction. Although some trees will unavoidably be lost to construction, they will be protected to the greatest extent possible, including the provision of protective collars around those near construction areas.

3.5 Cumulative Impacts and Other Environmental Considerations.

Wetlands. Several irrigation canals and drains will be crossed, paralleled and otherwise affected by different water and sewer lines. Minor disturbance to wetland vegetation within or bordering drains may occur as a result of project construction but over time there will be no net loss of wetlands as a result of the project. Coordination with the El Paso County Water Improvement District, which manages these facilities, and the Bureau of Reclamation is on-going. No properties owned or controlled by the International Boundary and Water Commission (IBWC) will be directly affected by the proposed project. The IBWC has expressed concern that attention be paid to that agency's need to operate and maintain the international flood control and boundary stabilization project. The IBWC also has commented that continued discharge of properly treated effluent from the WWTP should contribute beneficially to the IBWC wetland mitigation project associated with its Rio Grande American Canal Extension project. The U.S. Army Corps of Engineers, Albuquerque District, has commented that the project is authorized under a Nationwide Permit No. 12 pursuant to Section 404 of the Clean Water Act for utility line

backfill and bedding. The financial assistance for the amended project will be conditioned to require that the terms and conditions of this permit will be met during project implementation.

Floodplain. The LVWD service area is located within a fossil floodplain of the Rio Grande which was removed from the active floodplain by dams constructed to control and divert the river into the irrigation system which still serves the Lower Valley. El Paso County participates in the National Flood Insurance Program which requires floodplain management. Federal funding is conditioned to restrict unsuitable development of designated flood hazard areas.

Cultural Resources. There could be a potentially adverse impact to cultural resources in specific parts of the planning area, which was expected considering the age of intensive sedentary human occupation of the Lower Valley. It was determined through consultation with the LVWD, the TWDB, the Texas State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (ACHP) that a wastewater programmatic agreement (PA) would be prepared under ACHP procedures (36 CFR §800.13) regarding the potential effect of the project upon properties included in or eligible for inclusion in the National Register of Historic Places. The PA for the water delivery portion has been reauthorized and is in effect, and the PA for the wastewater part of the project has been amended to include a portion of the unincorporated community of San Elizario and has been reauthorized. Potentially significant historical, architectural, and archeological sites identified in the Socorro planning area have been evaluated to determine their eligibility for nomination to the National Register of Historic Places. Cultural resource management undertaken during the design phase of the Phase II and Phase IIB sewerage system project in Socorro has resulted in the avoidance of several National Register eligible properties. A formal plan for archeological data recovery and monitoring has been approved consistent with the PA, and the data recovery fieldwork has been completed, well in advance of Phase II sewer line construction.

Endangered Species. All of the protected species known to occur within the planning area are birds that may be occasional visitors. Although some of these species may be attracted to scattered man-made ponds, there is no suitable habitat for the species within the planning area. However, all funding for the project is conditioned to require that should either threatened or endangered plant or animal species be encountered during construction, work shall be stopped immediately and the EPA and the U.S. Fish and Wildlife Service will be notified in order that measures can be taken in accordance with the Endangered Species Act of 1973, as amended. The Texas Parks and Wildlife Department has asked that measures be taken to avoid damage to dense bushy vegetation adjacent to drainage channels to minimize erosion and siltation of drainage channels, and to stabilize newly graded areas, and to seed or sod graded areas with a mixture of drought tolerant native grasses and leguminous forms. These requests will be taken into consideration during the design and implementation of the project.

Environmental Justice Issues and Socioeconomic. Although the use of the Environmental Justice (EJ) index tool in this instance is limited, a high EJ indicator, coupled with the

beneficial nature of the environmental impacts associated with the project, gives the project a high priority and makes it a prime target for assistance. The EJ analysis is based on a comparison of (1) the percentage of minority people, (2) the percentage of economically stressed households making less than \$15,000 a year, and (3) the population within a one-half mile and a four-mile radius of the site with the corresponding percentages for the state. High growth projections estimate the population in the Socorro planning area at 59,257 and a projected population of 70,559 for the entire Socorro/San Elizario planning area by the year 2015. Presently, over sixty percent of the population in the planning area is of Mexican extraction. The Lower Valley is classified as a “low income area” with a 1990 median income of \$5,780 for employed persons 16 years of age and older, and a median household income of \$17,337. Of these, 34 percent of families had incomes of less than \$5,000 per year, 37 percent had incomes ranging between \$5,000 to \$10,000 per year, and 21 percent had incomes between \$10,000 and \$15,000. The make up of the area’s population, its high population density, and the annual household income levels all indicate that the area is economically stressed.

Approval of the grant for the proposed expansion would serve to offset some of the negative impact of the increased cost of water and sewer service to area residents due to the project. As a result of the amended LVWD Socorro/San Elizario project, it is projected that the average monthly residential combined water and sewer bill in Socorro will be between \$50 and \$67, depending upon financing details.

Other Factors. Other factors evaluated and determined not to be of significant or relevant consequence include radiation, solid or hazardous waste disposal, man-made hazards, natural hazards, and loading on infrastructures, municipal services and support systems, and health services and facilities. The project is not located within a county bordering the Gulf of Mexico and there are no coastal zone management areas that will be affected by the project.

4.0 OTHER ENVIRONMENTAL ISSUES CONSIDERED BY EPA

4.1 Unavoidable Adverse Effects. No significant adverse impacts on natural resources such as water and wastewater, community infra-structures such as public schools, emergency medical care, or public safety, recreation or transportation are expected to result from the direct, secondary or cumulative effects of the operational facility. Perhaps the most significant impact of the LVWD’s proposed water and sewer project is financial. It is projected that the average monthly residential combined water and sewer bill in Socorro will be between \$50 and \$67, depending upon financing details. Throughout the facilities planning process, there has been general concerns about the potential financial impacts of the project. No adverse comments regarding the amended project have been received during the State’s public participation process.

4.2 Relationship Between Local, Short Term Use of the Environment and the Maintenance/Enhancement of Long Term Beneficial Uses. Construction and operation of the proposed system will result in medium to high benefits to the health and economy of the area. In

the short term, there will be the inconveniences, the dust and sedimentation resulting from the disturbance of the area and connecting pathways to the WWTP. However, the long term beneficial uses of the environment will result in better social and community setting because of the correction of a public health and safety hazard. Increasing density of development can be a beneficial result. Environmental impacts from future growth would be lessened in areal extent and allow for the continued use of the farmlands, which, although intensively cropped, are not prime agricultural lands, and for the conservation of historic archeological and architectural sites. It would further allow for better community planning and coordination of services.

There are no unacceptable short or long term impacts to sensitive habitat, jurisdictional wetlands, or endangered or threatened species of plants, mammals, birds, reptiles, amphibians, and fishes are expected as a result of this project. Therefore, no mitigation action is proposed. No other local, state, or federal projects are planned or underway in the project area.

4.3 Irreversible and Irretrievable Commitment of Resources. Irreversibly and irretrievably committed resources associated with the facility are primarily the materials needed for the construction, the fossil fuels and energy resources needed to operate the facility.

5.0 ENTITIES TO WHOM COPIES OF THIS ENVIRONMENTAL ASSESSMENT WERE MAILED FOR REVIEW AND COMMENT

Copies of the EA have been provided to the following agencies and will be provided to groups, officials, and individuals on the general mailing list for review and comment. Interested parties may obtain copies of the EA by contacting the EPA, Office of Planning and Coordination (6EN-XP), 1445 Ross Avenue, Suite 1200, Dallas, Texas 75202-2733, or telephone 214-665-2258.

U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
U.S. Natural Resource Conservation Service; District Conservationist
Federal Emergency Management Agency
International Boundary and Water Commission
Texas Water Development Board
Texas Parks and Wildlife Department
Texas Historical Commission, State Historical Preservation Officer
Texas Natural Resource Conservation Commission
El Paso County
City of Socorro
City of San Elizario