

## Border 2020 New Mexico - Texas - Chihuahua Regional Workgroup

## 1. Improvement of the PM10 monitoring network in Ojinaga, Chihuahua

This grant will improve the city's operation of an air quality monitoring network through training the municipality's technical staff on operations and maintenance. It will also establish an agreement with the local authority, or a resolution from the city council, on a commitment to systematic permanent monitoring of air pollution.

\$ 14,327.00 to Ojinaga, Chihuahua, Mexico

### 2. Sustaining the environment at the New Mexico-Chihuahua border

This project will accomplish five tasks: (a) three educational presentations summarizing long-term efforts to identify low-cost methods for controlling blowing dust and soil; (b) four educational workshops for septic system owners on the proper maintenance and decommissioning of septic tanks; (c) two "knowledge exchange" events on water conservation programs specifically for the semi-arid climate condition within the Paso del Norte region; (d) commencement of planning efforts to update the 2002 Columbus, New Mexico-Ascensión/Palomas, Chihuahua Sister-City Cross-Border Contingency Plan; and (e) five presentations on the work that has been accomplished to-date.

\$100,000 to the New Mexico Environment Department, New Mexico

### 3. United communities for the prevention of environmental contamination in El Paso County

This grant will support several workshops on the proper maintenance of septic tanks for the over 2,300 users in the communities of Montana Vista, Tornillo, Cuadrilla y Valle Bonito in the County of El Paso, Texas. The results of this project will be the development and implementation of a community-based educational and environmental health program with respect to septic tanks, as well as a network run by each neighborhood that maintains the septic tanks.

\$ 50,072 to Adult Youth United Development Association, Inc., El Paso, Texas

### 4. Promotion of urban keyhole gardens in El Paso using rainwater harvesting techniques

The purpose of this grant is to show residential homeowners simple yet efficient ways to create, build, and maintain multipurpose urban oases in their backyards. Approaches include incorporating alternative water sources to irrigate "keyhole" gardens (small, permaculture gardens, normally horseshoe shaped for easy access to all the plants) and green shade structures. This project will promote the growing of vegetables and underutilized small fruit trees, as well as shrub species that are adapted to a desert environment, and also encourage outdoor activities, reduce solid waste in landfills by composting all organic wastes and paper, minimize water and soil contamination by utilizing the nutrients generated by composting, conserve water used in landscapes by following xeriscape principles, and reduce storm water pollution by capturing rainwater.

\$ 6,220 to Water Utilities, City of El Paso, Texas



### 5. Development of epidemiological tool and public outreach related to air quality

This grant will support development of an epidemiological surveillance system in a hospital in Ciudad Juarez, tracking air quality data along with the incidence of respiratory diseases associated with air quality. The intent is to be able to replicate this tool in all the hospitals and clinics in the city, and the information will then be used in a media awareness program that publicizes accurate disclosure of timely and easily understood information. A longer-term goal is to have this program lead to the identification of ways to decrease air pollution.

\$ 43,076 to Comisión Estatal para la Protección contra Riesgos Sanitarios en Ciudad Juárez (COESPRIS), Juárez, Chihuahua, México

#### 6. Recycling of bio solids in the agricultural soils of the Valle de Juárez, Chihuahua

This project will develop a program that applies biosolids, resulting as byproducts from the city's WWTPs, to agricultural lands as fertilizer. This will help reduce the risk to human and environmental health to the border region in El Paso TX-Cd Juarez, Chihuahua, due to the inadequate current disposal practices. The project will establish three demonstration plots in the Juárez Valley using representative crops like cotton or sorghum (summer) and wheat or oats (winter). The objectives of the project are to (a) determine the effect of biosolids on the physical and chemical properties of soil and subsequently on crop yield and profitability, (b) reduce the use of chemical fertilizers, and (c) reduce landfilled biosolids by about 50 percent in the medium term (four to five years).

\$ 44,850 to the Universidad Autónoma de Ciudad Juárez, Valle de Juárez, Chihuahua, México

### 7. Ysleta del Sur Pueblo Community Collection Center

This grant will support several related activities in the Pa Kitu living district of the Ysleta de Sur Pueblo, including(a) the establishment of a collection center for e-waste, household hazardous waste, used tires, and recyclables; (b) build community capacity for center management; and (c) develop a community education program related to waste management. Finally, the outputs and outcomes of this project will be used to develop indicators for community participation and future planning efforts.

\$66,470 to the Ysleta del Sur Pueblo, Texas



## Border 2020 Texas - Tamaulipas - Nuevo Leon - Coahuila Regional Workgroup

# **GULF Task Force Projects**

# 1. Determining the ideal biological filtration material for South Texas stormwater management

This project will identify the best locally available material for use in bioswales in the Lower Rio Grande Valley and South Texas. Bioswales are storm water conveyances that use vegetation and other organic materials to filter out pollution and silt. The project will test prototype bioswale in newly constructed parking lots on campus of the University of Texas Pan American in Edinburg. The results are expected to be useful for designers and managers of storm water management systems throughout the region.

\$ 26,022 to the University of Texas Pan American, Rio Grande, Texas

## 2. Alamo's Recycling TEAM Includes Everyone (ARTIE)

This grant will help the city of Alamo implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city. The project hopes to increase recycling efforts by at least 25 percent, increase awareness of non-point pollution and solutions, and establish partnerships that will promote environmental stewardship. The project will make quarterly community presentations at business and school or community events.

\$ 54,838 to the City of Alamo, Texas

### 3. Cleanup campaign through Keep Pharr (Texas) Beautiful

This grant will support a monthly cleanup program by Keep Pharr Beautiful with strong public outreach. The program is intended to reduce illegal dumping in the residential and commercial sectors and encourage residents to take responsibility for the beautification of their respective communities.

\$ 20,000 to the Public Works Department, City of Pharr, Texas

## FALCON Task Force Projects

# **1**. Diagnosis of, and recommendations regarding, the generation and management of waste in Mexico's northeast border region

This project will diagnose the generation of solid and "special management" waste in six border municipalities in Nuevo León and recommend waste management approaches to collection, temporary storage, and final disposal of the waste, including potentials for recycling. The grant will strengthen regional capacity and promote new activities.

\$21,798 to the Secretaría de Desarrollo Sustentable, Nuevo León, México

### 2. Characterization of drayage activities and emissions in Laredo-Nuevo Laredo air shed

This grrant will support a detailed characterization of the drayage activity (short-haul, cross-border transport of trade) in the Laredo-Nuevo Laredo region and its air quality implications.. With the information generated, decision-making and planning agencies can develop strategies and policies to



reduce air pollution in the region at a binational level. The data, methodologies, and information generated from the project can potentially be applied to other border locations as well.

\$ 89,750 to Texas A&M Transportation Institute, College Station, Texas

## Management of fats, oils, and grease in Nuevo Laredo, Tamaulipas

3. This grant will support the reduction of the concentration of fats, oils, and grease (animal and vegetable) in the effluent water coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo. These materials can clog sewer systems and wastewater treatment plants and pollute the Rio Bravo. The project will train stakeholders and help them install grease trap equipment.

\$32,533 to the Comisión Municipal de Agua Potable y Alcantarillado, Nuevo Laredo, Tamaulipas, México

## AMISTAD Task Force Projects

## 1. Conservation of Las Vacas stream in Acuña, Coahuila

This grant will support the design and implementation of actions to improve water quality and promote an adequate habitat for flora and fauna species in the stream Las Vacas, serving also to promote recreation areas. It will include binational collaboration that involves educational institutions and the private sector. The expected result of the project will be a series of sustainable programs related to surveillance and diagnosis of water quality in the stream.

\$44,200 to the Department of Environment, Ciudad Acuña, Coahuila, Mexico

### 2. Planning of a Health and Environmental information model along the Texas/Mexico border

This grant supports the development of a conceptual framework for a binational environmental and health information repository. This includes the development of a binational follow up system on health and environment in the communities of the border region between Texas and Coahuila. This will be a pilot project with emphasis on: 1) identification of required tools and capacities; 2) comparison of existing systems from both countries, considering their strengths and weaknesses; 3) identification and recommendation on training or educational needs; and 4) development of an indicators system to measure environmental health in the region.

\$ 39,875 to El Colegio de la Frontera Norte, Piedras Negras, Coahuila, México

### 3. Promotora-led environmental health education for children in Eagle Pass, Texas

This grant will support the development of an integrated approach for educating families on the dangers of exposure to mercury, lead, and pesticides, especially the effects on respiratory health, specifically asthma. These modules will be used to provide training to health *promotoras*, who subsequently will provide educational information in elementary schools, child care settings and to colonia residences. The project will target approximately 800 elementary and head start students, parents from 40 homes, and approximately 70 school teachers/staff members.

\$ 69,083 to La Amistad AHEC dba Southwest Border AHEC, Eagle Pass, Texas