EPA Region 6: US-MX Border 2020 Program Newsletter

Volume 1: January – May 2016

Table of Contents:

El Paso Border Office Regional Restructure……1

Managing Air Quality on US-MX Int. Border (JAC)……1-2

Paso del Norte Water Taskforce Workshop……3-4

Disposal of Scrap Tire Under Local Gov't Control……5-6

Making a Visible Difference: Anthony, New Mexico……6-7

Emergency Response Hazardous Rail Car Leak Mitigation El Paso/Juarez/Dona Ana County Project……7-9

Emergency Response: Harlingen – Matamoros …9-10

New Mexico-Chihuahua Rural Taskforce Public Meeting……10-11

Four-State Activities (Amistad, Falcon, Gulf)……10-13

Children's Health Symposium: El Paso, Texas……13-15

3-State & 4-State RWG Partner Calls……15-16

Border 2020 Project Funded……17

Region 6 U.S.-Mexico Border Team……18

4-State RWG Contact…..19-20

3-State RWG Contact…..19-20

Office of Environmental Justice, Tribal and International Affairs
EPA Region 6
El Paso Border Office
4050 Rio Bravo, Suite 100
El Paso, Texas
(915) 533-7273

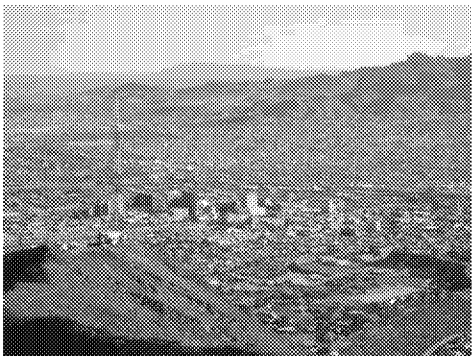
OEJTIA Director:
Arturo Blanco

Border Office Director:
Carlos A. Rincon

Border Program Staff:
Maria Vasquez
Debra Tellez
Maria Sisneros

EL PASO BORDER OFFICE REGIONAL RESTRUCTURE

In October 2015, the El Paso Border Office was restructured and joined with the Office of Environmental Justice and Tribal Affairs to become the Office of Environmental Justice, Tribal and International Affairs (OEJTIA). The Office of Environmental Justice, Tribal, and International Affairs works closely with communities to facilitate culturally sensitive communication, find solutions, or reduce environmental challenges.



View of City of El Paso Texas.

The Environmental Justice program's goal is to ensure that all people are protected from disproportionate impacts of environmental hazards by working with and on behalf of impacted communities. The U.S.-Mexico Border program honors commitments for joint U.S. and Mexico responsibility under the La Paz Agreement for protection of the environment and public health in the border region. The Tribal Affairs program serves 66 federally recognized Tribes on a government-to-government basis, consistent with their inherent sovereignty, to resolve environmental concerns. The OEJTIA also administers the General Assistance Program (GAP) that awards grants to tribes; implements the Border 2020 plan; and administers EJ2020 throughout Region 6.

MANAGING AIR QUALITY ON OUR U.S. - MEXICO INTERNATIONAL BORDER: THE JOINT ADVISORY COMMITTEE (JAC) FOR AIR QUALITY IMPROVEMENT" HELD ITS 66TH MEETING

The Paso del Norte region located where Texas, New Mexico, and Chihuahua meet, encompasses the Ciudad Juarez, Chih. El Paso, TX and Dona Ana County, NM that form a single metropolitan area separated by an international border, where thousands of people cross daily making it the busiest U.S. Port of Entry; while united by common cultural, historical, and economic factors. Paso del Norte inhabitants have suffered serious air pollution problems taking a heavy toll on the region's environment.

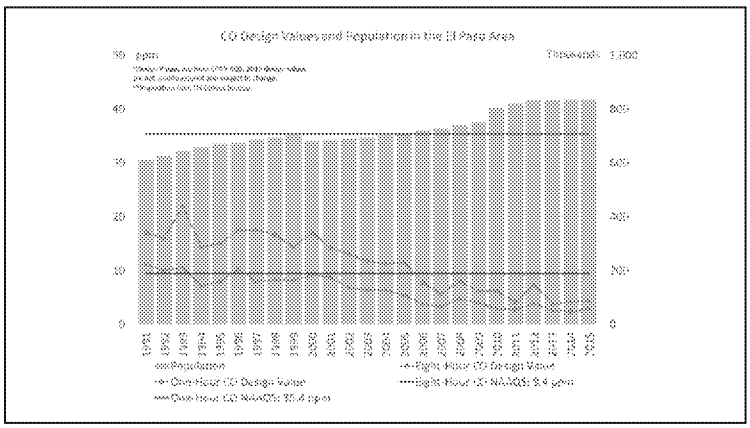
After decades of frustration, many express optimism and have seen real progress been made in the fight to improve air quality. A significant credit belongs to the JAC, which is a group of concerned citizens that include government officials, environmentalists, business leaders, non-governmental organizations that are fully committed to reduce air pollution and improve air quality as efficiently and effectively as possible, as well as, developing constructive policies and programs that significantly improve the region's air quality, acknowledging that air pollution, regardless of its origin, affects everyone.

Conventional state and federal environmental policies are hindered by political boundaries, but because pollution does not stop at the border, the JAC have pushed for a regional approach to address the air quality problem. Through successful efforts Paso del Norte inhabitants are now able to engage government regulators and develop cooperative strategies to improve air quality throughout the air basin.

ED_002319B_00013498-00001

JAC Cont'd

Key Factors are responsible for the success of the Paso del Norte JAC, which for the most part, they cannot be reduced to a single formula, however, there are several binational tasks that have been identified as key factors that might be useful to others interested in establishing a similar community-based organization.



Carbon Monoxide levels from 1991-2015 in El Paso Texas.

1. Members held a common understanding of the problem, right from the start, members shared a common objective: to make the air cleaner.
2. Getting the right people involved, early in the process, government, business, and civic leaders that could make things happen.
3. Focus on finding solutions rather than assessing blame; members shall adopt the philosophy that air pollution is a common problem requiring solutions.
4. Set goals and objectives early that have both short and long term objectives. Short term objectives are important so the group can have a sense of accomplishment. Long term goals and objectives also help keep the group focused because some problems cannot be solved very quickly.
5. Encourage members to stay involved, because the endeavor is an inclusive organization, allowing anyone interested in finding solutions to the air pollution problem to join.
6. During initial meetings, brainstorming sessions are held to solicit input from members of the community that resulted in members becoming stakeholders in the success of JAC's projects.
7. Good timing. As a result of NAFTA, the border received increased attention from both the U.S. and Mexican governments. Environmental concerns led to a commitment to reducing pollution in the border region.
8. Patience is critical to establishing new organizations.

Over 50 Bi-national stakeholders attended the May 2016 Meeting.

On May 7, 2016 the U.S. Environmental Protection Agency (EPA) and the Mexican Environment and Natural Resources Secretariat (SEMARNAT) along with the city of El Paso, Dona Ana County and the Juarez municipality celebrated the 20th anniversary of the creation of the binational JAC, chaired by Mark Hansen of USEPA and Ana Patricia Martinez of SEMARNAT-Mexico. This group continues to be a model for binational cooperation and border communities, said EPA Regional Administrator Ron Curry, adding that area residents should be proud of local leaders for their commitment to bring healthier air to their children and families.

ED_002319B_00013498-00002

Paso del Norte Water Taskforce Workshop

PDNWTF attendees

On May 20th, 2016, the Border 2020 Water Taskforce in conjuction with the Paso del Norte Water Taskforce (PDNWTF) held a joint workshop in El Paso, Texas at the University of Texas at El Paso. The workshop served as part of an effort to re-convene the Paso del Norte Water Taskforce which originally formed in 1998 in an effort to bring stakeholders together to work cooperatively on a regional approach for future planning and discussion of water sources in the region, and to help assure water quality and availability within the Paso del Norte Region.

Much like the Border 2020 Water Taskforce, which was created to identify water issues of the highest priority in the región, the workshop was held to bring key bi-national stakeholders to discuss cooperative alternatives for water management considering the variety of scenarious affecting the border región that, among others, include the possibility for greater demand and less availability of water due to diverse factors.

Prior to the workshop, members of the PDNWTF in conjuction with Texas A&M Kingsville conducted a survey from stakeholders in the región which included irrigation districts, water utilities, water governance institutions, water planning agencies as well as other water stakeholders to gather feedback on current methods of water management practices. The purpose of the survey was to document how stakeholders: 1) currently address changing hydrologic conditions; 2) plan to opérate under a scenario of future water shortage; and 3) envision a sustainable water future for the Paso del Norte (PDN) segment of the Rio Grande/Bravo.

Approximately 50 bi-national stakeholders attended the workshop in El Paso, Texas. Both commissioners for the US and Mexican Sections of International Boundary and Water Commission (IBWC/CILA) gave opening remarks, as well as, UTEP President, Dr. Diana Natalacio, during the lunch session. Brief expert report presentations were given on: 1) 2030 Projected water supply and demand in the PDN segment of the Rio Grande/Bravo for Mexico, Texas and New Mexico; 2) 2030 Project population growth in the PdN; 3) How climate change and variation are reducing surface water supply; 4) How reservoir sedimentation reduces Elephant Butte storage Volume; 5) Results of the Stakeholder Survey on water management practices and 6) Next steps for the PDNWTF.

During the final session of the workshop, attendees voted on the next steps to which the PDNWTF priorities should focus on engaging stakeholders. Approximately 14% of the atteendees agreed that focusing on technology was the top priority, followed by Governance (i.e. cross-border both state and internationally) at 13% and then Conservation efforts, primarly from irrigation district efforts but not excluding municipal, on-farm practices and river management. The table below lists all of the next step as voted on by attendees.

ED_002319B_00013498-00003

Paso del Norte Water Taskforce Workshop cont'd

STRATEGY		VOTES	%
Reuse		**11**	**5.2%**
	potable	9	
	Non-potable	2	
Economic Incentives		**18**	**8.6%**
	Price Incentives	3	
	Financing	7	
Education		**22**	**10.5%**
	General public	9	
	Schools	3	
	Political	9	
Environment		**16**	**7.6%**
	Watershed & Water Quality	16	
Legal/Regulatory		**15**	**7.1%**
	Environmental Protections	5	
	Diversion/Pumping limits	6	
	Enforcement of (existing) Laws	4	
Engagement		**24**	**11.4%**
	More stakeholders	15	
	More involvement	2	
	Table-top exercises	2	
	Surface Water – Groundwater coordination	1	
	Forums	4	
Governance		**28**	**13.3%**
	Inter-sector	2	
	Cross-border (state and national)	23	
	Change in laws	3	
Green Infrastructure		**20**	**9.5%**
	Rainwater harvesting	5	
	Greywater	0	
	Storm water capture	4	
Technologies		**29**	**13.8%**
	Desalination	16	
	Research & development	13	
Conservation		**27**	**12.9%**
	Municipal	2	
	On-farm	9	
	Irrigation district	12	
	River management	4	

Results on Priorities for PDNWTF

ED_002319B_00013498-00004

DISPOSAL OF SCRAP TIRES UNDER LOCAL GOVERNMENT CONTROL: *A SUCCESSFUL EXAMPLE OF BINATIONAL COOPERATION. – Rethinking scrap tires as a resource and no longer as a waste, through a binational cross border business driven approach.*

Juarez is where the largest scrap tire pile was accumulated, estimated to have more than 6 million tires in 2004, causing a permanent risk of fire, insect borne diseases and death. Currently this emblematic site once plagued with scrap tires is virtually clean as a result of a coordinated effort by the City of Juarez and other stakeholders.

Ciudad Juarez Tire Pile prior to Border 2020 Program

A successful example of a binational cooperation supported by the Environmental Protection Agency (EPA), Mexico-Secretariat of the Environment and Natural Resources (SEMARNAT) through the U.S.-Mexico Border Environment Program (B2020), jointly with the Border Environment Cooperation Commission (BECC), the North American Development Bank (NADB), Grupo Cementos de Chihuahua (GCC) TCEQ, and those Public Private Partnership (PPP) such as a nongovernment organization, Union Ecologica de Juarez, A.C., the State of Texas Alliance for Recycling (STAR), and the Rubber Manufacturer Association (RMA)

The US – Mexico B2020 Private Public Partneship (PPP) approach assembled a work-team with the purpose of rethinking scrap tires as a resource instead of a waste and developed actions to effectively manage scrap tires in the Paso Del Norte region that may serve as a model for other regions. This creative approach creates a forum and gives a voice to a diverse group of participants and expertise from the scrap tire community, including elected officials, NGOs, the tire industry, processing and recycling companies, and government officials from local, state, and federal offices.

Scrap tires mostly converted into piles of shredded tires, best describe present interpretation of final disposal at border communities. Texas' local governments being the public entity nearest to citizens are the ideal parties to secure a real and true final removal of scrap tires with the disposal that may occur outside of the state of TX across the border, under appropriate environmental international rules and regulations. The issue of scrap tire collection, storage, shredding and final disposal is one that requires financial collaboration of those involved, named either the consumers, the generators, the solid waste - environmental departments of local governments, private sector recyclers/shredders and environmentally regulated industrial entities.

The Paso del Norte used tires team continue carrying out activities and outcomes with a PPP approach by moving forward on 5 strategic goals through a Technical Advisory Committee (TAC), which recruited stakeholders for each of the 5 strategies that the work teams have as GOALS. Meanwhile, it applies themselves in searching for an on-going business plan that may serve as a template of a private–public partnership in managing used tires, keeping at all time a Business THEME: "Rethink scrap tires as a resource instead of a waste," and develop an action plan to manage scrap tires as a binational resource in the Paso del Norte region.

ED_002319B_00013498-00005

Scrap Tires Cont'd

The 5 Goal strategy are 1) Technical Advisory Committee, 2) Legislation, 3) End use Markets, 4) Funding, and 5) Enforcement.

Illegal Scrap Tire Pile in Cuidad Juarez

Carlos Rincon is working closely with Ciudad Juarez's entrepreneurial stakeholders, known as Union Ecologica de Juarez, A.C., a group that for the last two years have carried out a domestic business plan for shredding piled tires in Northern States of Mexico, most particularly Chihuahua. The Ciudad Juarez's business partners have accumulated infrastructure and a contract with a Mexican consortium of cement plants capable of processing and reclaiming more than 5 thousand shredded used tires per day and are looking into the New Mexico and Texas used tire piles and New Tire Shops to legally transport discarded used tires for its disposal in Cement Factories in Northern Mexico. Members of the TAC, and stakeholders for each of the 5 strategic goals meet quarterly in moving forward with tasks and actions that each strategic goal has established.

Making a Visible Difference: Anthony, New Mexico

EPA developed the Making a Difference Initiative to "work each and every day - hand-in-hand with other federal agencies, states, tribes and local communities - to improve the health of American families and protect the environment one community at a time, all across the country to better support the efforts of communities, especially those that are environmentally overburdened, underserved, and economically distressed. The City of Anthony, formed in 2010, is in the early stages of community development planning. The city does not own any of its utilities, and lacks adequate zoning and subdivision regulations as well as recreational facilities. The city hopes to have green components installed to detain flows and remove sediment to deal with flooding issues. EPA will work with the community to assist with the development of sustainable municipal services and infrastructure by fostering partnerships and leveraging resources from other federal, state and local agencies.

The City of Anthony received Technical Assistance under the Office of Sustainable Development Program's Building block tool which consisted of the Sustainable Strategies for Small Cities and Rural Areas Technical Assistance workshop. Three conference calls between the City of Anthony, OSD, and the El Paso Border office staff members were conducted to finalize the plans for the technical assistance workshop in addition to a self-assessment completed by Anthony staff. On February 23-24, 2016 the Sustainable Strategies for Small Cities and Rural Areas workshop was brought to Anthony NM. The Mayor and staff gave a tour of Anthony, highlighting their vision for Anthony which was followed by a community meeting.

February 23-24, 2016 Attendees Workshop

ED_002319B_00013498-00006

Making a Visible Difference Cont'd

The second day consisted of the actual workshop focused on identifying and revitalizing the down's main street, strengthening the local economy, providing housing options and efficient infrastructure. The final product was a Next Steps Memorandum for the Sustainable Strategies for Small Cities and Rural Areas will serve as an action plan for the city of Anthony to use as a guide for moving forward in their city growth. Attendees included representatives from HUD, Senator Udall's office, Senator Heinrich's office, NGO's, and EPA R6 staff members Arturo Blanco, Carlos Rincon, Maria Sisneros and Debra Tellez.

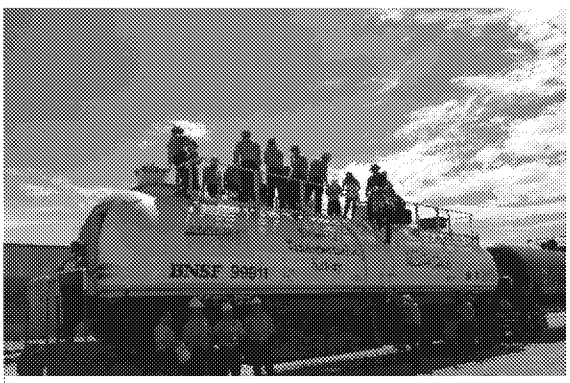
View of Main street in Anthony, New Mexico

Elections for the City of Anthony were held shortly after the workshop. Debra Tellez met with the newly elected Anthony Mayor March 31st to brief her on the Making a Difference Initiative, Building Blocks workshop and to get her vision for the City of Anthony as other initiatives are pursued.

A coordinated effort between Rio Grande Council of Governments along with EPA R6 staff members (Debra Tellez, Nelly Smith, Susanna Perea, and Tom Ruiz) and the Mayor of Anthony, NM assisted the City of Anthony to submit as a letter of interest for the next phase of the Office of Sustainable Communities Smart Growth Program. SGIA offers technical assistance to communities wanting to incorporate smart growth in their development. City of Anthony was seeking assistance in creating an Economic Development Growth council and assistance with architectural and infrastructure design of its main street and implement the actions from the Feb 2016 Building Blocks Anthony Workshop.
In order to identify lessons learned and best practices that will guide the agencies work in communities going forward, OSC created a more consistent reporting framework to help convey the story of Making a Visible Difference efforts and better measure the effectiveness of the MVD approach. Debra Tellez captured all project, partner, and status information on the Anthony MVD program to input into the database.

Emergency Response: Hazardous Rail Car Leak Mitigation El Paso/Juarez/Dona Ana County Project

The City of El Paso received a Border 2020 Grant of $30,000 in 2015, to increase preparedness and response involving hazardous railcar leak incidences in the Paso del Norte region. Hazardous rail cargo cross the international boundary via the "Black Bridge" between El Paso, Texas and Ciudad Juarez, Chihuahua, Mexico. Many of the railcars are staged in downtown El Paso, with the potential of exposing thousands of people in both El Paso and Ciudad Juarez to an incident that would have an immediate and dire effect on the populace and environment when exposed to a hazardous substance. In addition, a newly constructed inter-modal facility in Dona Ana County, New Mexico



July 2015 Training Event First Responders

ED_002319B_00013498-00007

Emergency Response: El Paso Cont'd

adjacent to the Santa Teresa Port of Entry has increased the amount of rail traffic in the region and thus increasing the potential for hazardous railcar incidents.

July 2015 Responders from Cuidad Juarez, Dona Ana and El Paso

The project funded helped to increase preparedness for possible hazardous railcar incidences, increase mitigation capabilities and helped to re-establish and continue communications between first responders between the communities of El Paso, Ciudad Juarez and Dona Ana County. The project entailed the purchase of the three Midland Kits, equipment used to stop and contain leaks that may occur if a railcar incident were to occur involving hazardous substances. Each of the jurisdictions received one of these kits. The kits are the most state of the art pieces of equipment that first responders can utilize for such incidences. Neither jurisdiction had this piece of equipment prior to the grant. The equipment was necessary as the rail industry has changed to what is termed "next generation" railcars for the transportation of a diverse array of hazardous materials. These new railcars utilize different valves and fittings to load and unload the material that is being transported, thereby, making much of the traditional mitigation equipment the region possessed now obsolete.

In July 2015, over 120 first responders from El Paso, Ciudad Juarez and Dona Ana County Fire Department, over a 3-day training, received the proper training needed to operate and learn how to utilize the Midland Kits. Trainers from BNSF who invented the Midland Kit trained the responders, utilizing a mock railcar that was transported from their training rail yard. The training consisted of lecture, PowerPoint and dialogue between the training participants and instructors. The final portion of the training involved utilizing a Midland Kit on a training rail car, to properly learn how to handle this piece of equipment. The training event was covered by the local media, generating six new stories on the local television in both El Paso and Juarez, as well as, two newspaper articles, one in the El Paso Times and another in the El Diario de Juarez.

April 2016 Refresher Training

In April 2016, once the Midland kits had been purchased by El Paso Fire Department, a half-day refresher training was held with representatives from each of the jurisdictions. In addition, that day each of the jurisdictions received their own Midland Kit to take back to their respective cities. With the funding of this project, the first responders within the region are now better equipped and prepared to deal with hazardous materials involving railcar. In addition, there is an increase in awareness and knowledge among the first responders of the threats that involve railcars in the region. With each jurisdiction within the Paso del Norte having its own state-of-the art Midland kit, each jurisdiction can better respond to such incidences. Last, communication among the jurisdictions was re-established and strengthened with the training event that occurred.

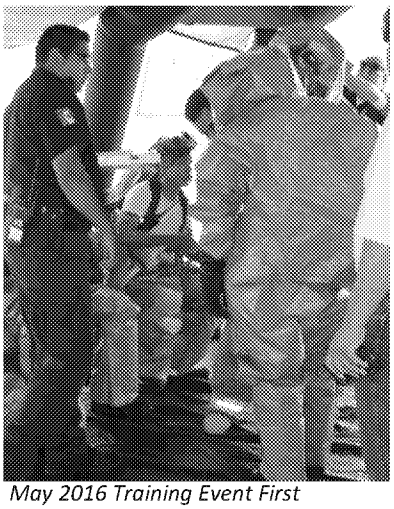
ED_002319B_00013498-00008

Emergency Response: El Paso Cont'd

Equipment Exchange to Ciudad Juarez and Dona Ana County First Responders.

Emergency Response: Bi-National Tabletop and Functional Exercises between the cities of Harlingen, Texas and Matamoros, Tamaulipas

The City of Harlingen received a $60,000 Border 2020 Grant of for cross-training and exercises with the City of Matamoros. The objectives of the project included: training Train for the tactical incident management of on-scene operations at a Hazardous Materials Incident; preparation of the First responders to manage during the first hour of a Hazardous Materials Incident; learn how to identify hazardous Materials transporting containers; learn control techniques for leaks and spills and; train to use the Incident Command system and remote communication technology. Part of the training included review the sister-city contingency plan in place and utilizing it while conducting a table top and functional exercise.



May 2016 Training Event First Responders between Harlingen and Matamoros.

The training and two exercises conducted took place from May 16 through May 20, 2016. The training included:
Rescue and Recovery: Introduction response information exposure and contamination and decontamination procedures;

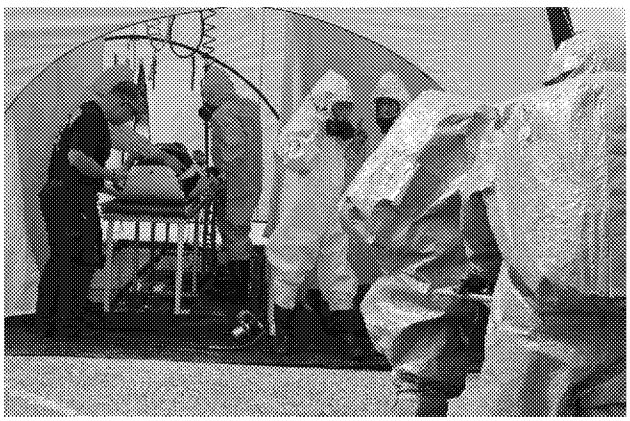
ED_002319B_00013498-00009

Emergency Response: Harlingen-Matamoros Cont'd

- Personal Protective Equipment: Chemical science personal protective equipment
- Product Control: Container types product control measures.

The table top and functional exercises looked at a response that involved a release of a ton from a chlorine cylinder as well as a release of chlorine from a rail car. The project funded resulted in the enchancement of a bi-national response by including the latest technology advancements for communications; enchanced the response capabilities of responding to a potential chemical exposure/accident that could affect both sides of the border; and updated the sister city plan contacts. The final day which included the functional exercise was covered by local media. The story can be found at: http://www.rgvproud.com/news/local-news/fire-departments-team-up-for-hazmat-training

Medical monitoring of responders during May 2015 exercise


Practice medical evaluation of hurt personnel during exercise

New Mexico/Chihuahua Rural Task Task Force Public Meeting

On May 17, 2016, the New Mexico-Chihuahua Rural Taskforce held a public meeting at the Columbus Library, Columbus, NM. Mayor Phillip Skinner provided welcome remarks, followed by Ing Martin Palomares, Desarrollo Urbano y Ecologia Acension, Chih who has served as the Rural Task Force Leader from Mexico for the past four years, two of which have been without a U.S. counterpart. NMED District Supervisor Mike Kensler a longtime supporter of the Task Force having attended and presented at last year's public meeting, also provided opening remarks.

Public meeting in Columbus, New Mexico (May 17, 2016)

Carlos Rincon led the meeting with the mission of the U.S./MX Border 2020. Twenty five participants attended the meeting which focused on Holistic Range Management, Climate Smart Agriculture, as well as issues related to the need for Water Conservation in Ascension and the need for Solid Waste Management program in Palomas. Professor Gerardo Bezanilla of Autonomous University of Chihuahua presented preliminary results of his Border 2020 project on slowing or reversing the effects of desertification's caused by overgrazing. Peter Edmunds, Border Partners discussed water conservation efforts, in-house

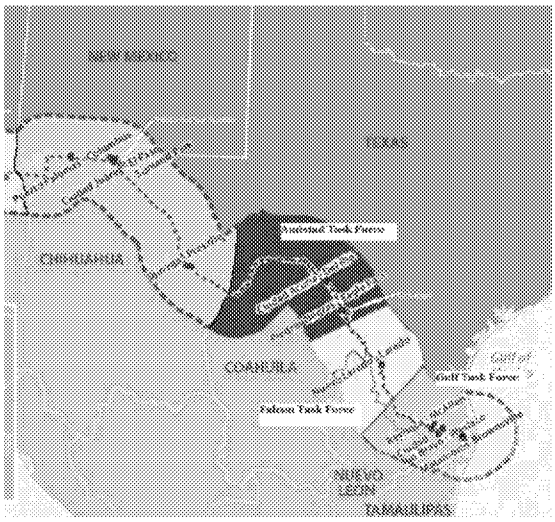
ED_002319B_00013498-00010

New Mexico/Chihuahua Rural Task Task Force Public Meeting cont'd

and community gardens and gray-water being used for irrigation. Dr DuBois discussed the effects of dust storms on health and safety He also is working with National Weather Service to inform the public about dust events via social media. Dr. David Johnson, NMSU Institute for Energy and the Environment researcher presented the results of his recent experiments with soil amendments made using composted cow manure. He showed an increase in crop production by shifting from a bacterial-dominant to a fungal-dominant product while building the soil and without using fertilizers. These results may ultimately cause a shift away from the use of chemical fertilizers, which can cause air and water quality problems. Attendees included, SEMARNAT, NMSU and UACH academia, NGO's, and local residents.

Four State Regional Workgroup Activities

The Four-State Regional Workgroup is the most complex of the four regional workgroups within the Border 2020 Program, due to its geographical expanse and the number of municipalities that it contains. The region includes parts of three Mexican States and a total of at least 29 municipalities on Northern Coahuila, Nuevo Leon and Tamaulipas, and 168 cities and towns on the U.S. side of the border.



4-State RWG Geographic Map

The **Four-State RWG** is divided into three geographically based Task Forces (TF) — a) Amistad, b) Falcon, and c) Gulf, each of which has established subject-specific committees related to its priority concerns. The subcommittees in each task force are: - Waste, - Water, - Environmental Education, - Health and - Emergency Preparedness. (NOTE: It should be noted that the Gulf TF does not have a Water subcommittee)

In 2015 through early 2016, each of the region's TFs had three public meetings focusing on highlighting actions that were covered at the Waste Policy Forum that took place in Tijuana, B.C. early in 2015. At each of the TF meetings, the program also addressed discussion on the 2-year action plan priorities, accentuating on the various Border 2020 projects that had been funded in 2013-2014 and presenting to stakeholders the Border 2020 Projects that were funded in 2015.

Brief narrative of the 2016 meeting at each of the three TFs.-

Amistad Task Force. – Granting that the March 10, 2015 meeting took place in Ciudad Acuña we continued rotating the meeting locations and the December 8th 2015 meeting took place in Del Rio, TX, while the March 9th, 2016 in Eagle Pass, with attendance of approximately 50 persons including local environment and ecological departments, as well as, public works and Civil Protection managers, representing Piedras Negras, Ciudad Acuña and Nava, Coahuila, Eagle Pass and Del Rio, TX whom along with Kickapoo Traditional Tribe, State Officials from TCEQ and Coahuila Environment Secretariat, BECC, education institutions, US-EPA and SEMARNAT.

The Amistad TF level of collaboration and engagement from B2020 partners, underscore the importance of projects implemented on a binational scope that addresses environmental priorities with strategies that include improving air quality, assurance of water availability with high drinking standards, reducing waste, and ways to share experiences and best practices that addresses effects of environmental threats.

ED_002319B_00013498-00011

4-State RWG Activities Cont'd

A B2020 success story is the Arroyo de las Vacas project that include stream flow clean up, ecosystem restoration, wildlife conservation and education components, creating a geographical database, identifying areas of concern and of environmental wealth that resident can access, making it a tool for discussion which is useful to make decisions on improving conditions of the Arroyo de las Vacas.

The Southwest Border Area Health Education Center conducted a Promotora environmental education training on pesticide awareness and asthma triggers, an example which builds up partnership between UT School of Public Health, TX Department of Health and Human Services, Mexican Consulate and Eagle Pass Independent School District. In this project, students, teachers and parents received training and 6 Promotoras were certified to train residents on risks to minimize exposures to harmful chemicals. At 30 homes, certified promotoras did a pre-assessment of chemicals used at households, and a post assessment to identify changes in behavior patterns.

A project on materials and waste management conducted by Eagle Pass has established a Plastic Bag Ordinance that would: 1) Protect the environment by reducing use of plastic bags, 2) Protect life and property from flooding resulting from storm drainage obstructed by plastic bags, 3) Protect fish, animals and rivers from the adverse effects of plastic bags, and 4) Promote the beautification of the city of Eagle Pass. On April 1, businesses must provide signage of the phase out period including information about benefits of reducing, reusing and recycling. A five-member environmental advisory committee was formed to monitor the effects of the ordinance and report back to city council.

The Falcon Task Force.- WASTE Committee, met on March 8, 2016 hosted by City of Laredo Environmental Services, at which 25 persons attended including managers from local environment and solid waste departments, as well as by Representatives of Laredo City Council and Mayors of Laredo and Nuevo Laredo, whom joined a State's Government official representatives of TCEQ and Nuevo Leon Environment and Sustainable Secretariat, BECC, Mexico's Consulate General, local educational institutions, USEPA and SEMARNAT.

Meeting Participants in Falcon Task Force on March 8, 2016.

The Falcon TF Waste Committee meeting included a site visit to the City's recycling center, encouraging stakeholders to share about updates related to waste projects within the two year action plan. At the meeting the recently appointed Mexican Co-Leader for the Falcon Emergency Response Committee was presented to the group. The City of Nuevo Laredo Ecology Director provided an overview of the City's household hazardous waste (HHW) program including the City's HHW facility. The Nuevo Laredo administration is working with its waste service provider on an upgrade collection services complementing a City's stewardship on HHW collection that started back in 2005 where residents bring spent used oil, paint waste, pharmaceutical and detergents among other HHWs.

The Waste Committee Co-leaders proposed developing a list of certified waste transporters that collect Electronic-Waste (E_Waste), and such directory could be shared at BECC's E_waste Forum that is

ED_002319B_00013498-00012

4-State RWG Activities Cont'd

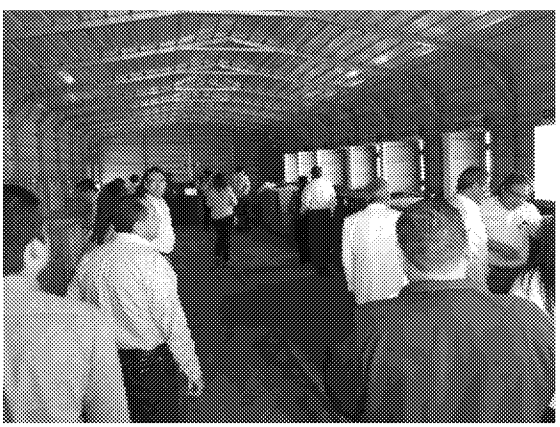
scheduled to take place in the Baja California/California border region. The City of Laredo has been promoting environmental stewardship in the community investing in renewable energy by phasing out incandescent light bulbs and replacing with 7000 LEAD lamps. Laredo Environmental Services in conjunction with the City's Health Department have been cleaning up streams to prevent vector sources and illness related to Dengue and Zika viruses.

As a resourceful partner the Technological University of Nuevo Laredo is working with Roadrunner Mulch on a project to reuse scrap tire material. Augusto Garcia Mier y Teran of Roadrunner Mulch discussed scrap tire disposal and possible solutions. Roadrunner Mulch collects, grinds, processes, sorts, and distributes rubber mulch, buffing and crumb rubber. The company has processed over 200 metric tons per month and recycled more than 2 million pounds of rubber. It has offices in Mexico City and a retreading plant in Monterrey, Mexico. Because a tire recycling business requires large volumes of scrap tires to be profitable, the amount of scrap tires generated in Laredo and Nuevo Laredo makes it difficult to justify a multi-million tire recycling complex from a financial perspective.

Gulf Task Force – Waste Subcommittee Meeting, met on Friday, March 11, 2015 in Pharr, Texas. The meeting was attended by approximately 30 bi-national stakeholders from both the U.S and Mexico. Attendees included representatives from EPA, TCEQ, SEDUMA, City of Reynosa, City of Pharr, BECC, University of Texas Rio Grande Valley and others.

The meeting included presentations from SEDUMA who had two Border 2020 Projects funded in 2015. Both projects awarded to SEDUMA were related to scrap tire management and solid waste recycling programs. The projects focused on assisting the municipalities of Rio Bravo and Valle Hermoso, Tamaulipas develop a strategic management plan for their municipal solid waste. The goals of the project include: reorientating their traditional solid waste management including collection and disposal to integrated waste management; promote environmental education and training to help reduce waste generation and encourage best management practices on segregation, reuse and recycle; strengthen municipal environmental legislation on solid waste; strengthen administrative and operation areas response for waste management; and implement an inventory of urban solid waste generators.

The City of Pharr, a previous recipient of Border 2020 funds, presented their recycling program "Let's Clean it and Green it Up" as well as gave stakeholders a tour of their recycling facility. The City of Pharr received a Border 2020 grant to assist Pharr with offering more frequent and convenient solid waste dispoal events, as well as host more beautification and cleanup events and improve their recycling and outreach programs.



Gulf TF particpants tour Pharr Recycling Center

Stakeholders also heard a presentation by an NGO "Recycled Dreams" which teaches women in the community the skills needed to make recycled bags and purses from various recyclable materials which can then be turned and sold for a profit. The organization focuses not only on giving women a way to pursue some economic opportunity to improve their economic situation, but also promoting and creating awareness of recycling and keeping communities clean.

ED_002319B_00013498-00013

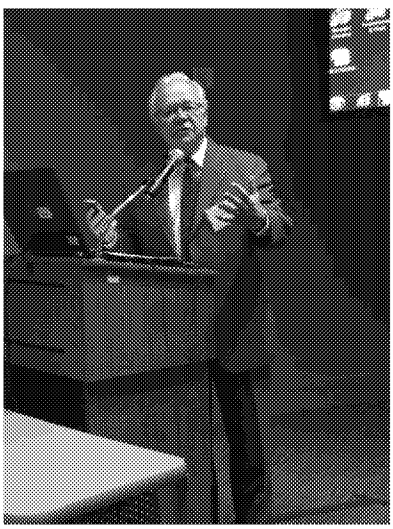
Children's Health Symposium: El Paso, Texas

The Children's Environmental Health program is central to EPA's mission. In the past three years, the EPA's U.S.-Mexico Border 2020 program in regions 6 and 9 have provided more than $500,000 to a dozen organizations to specifically address children's health. Funding has supported capacity-building through training for childcare and school personnel, for environmental home assessments, to educate

farm workers about take-home pesticide exposures, and to train those who train others. These efforts have directly impacted about 25,000 people, who, in turn, impacted 35,000, or even 50,000 people in the border region.

In 2015, the U.S. Environmental Protection Agency's began to work with several partners to address binational environmental challenges and disproportionate health impacts that burden border communities, especially as they impact children. Both Region 6 and Region 9's Office of Children's Health, in coordination with EPA's headquarters Office of Children's Health Protection decided to address and bring greater awareness to children's health protection along the border through a variety of initiatives. One of these initiatives included promoting two children's health symposiums focused specifically on children's health protection. Children's health along the border is often affected by the mismanagement of pesticides, poor indoor and outdoor air quality, misuse of chemicals and other waste, poor water quality, and binational chemical emergencies. It is important that healthcare professionals, public health practitioners, community health promoters or *promotoras*, and others in the community that work or care for children understand the crucial links between the environment and health in order to take steps towards improving children's health outcomes in communities along the Border.

The first children's health symposium: *Children's Environmental Health on the Border: Protecting Children Where They Live, Learn, and Play* was held at the Texas Tech University Health Sciences Center in El Paso, Texas, September 24-25, 2015. EPA Region 6 partnered with Texas Tech-Southwest Center for Pediatric Environmental Health at Texas Tech, US/Mexico Border Health Commission, the US/Mexico Border 2020 Program, and Children's Environmental Health Programs, and the Border Environment Cooperation Commission (BECC) for the binational symposium. Texas Tech is now home to the Pediatric Environmental Health Specialty Unit, a network of physicians jointly funded by EPA and the Agency for Toxic Substances and Disease Registry. The Unit sponsored the symposium and Texas Tech provided continuing education credits to attendees.



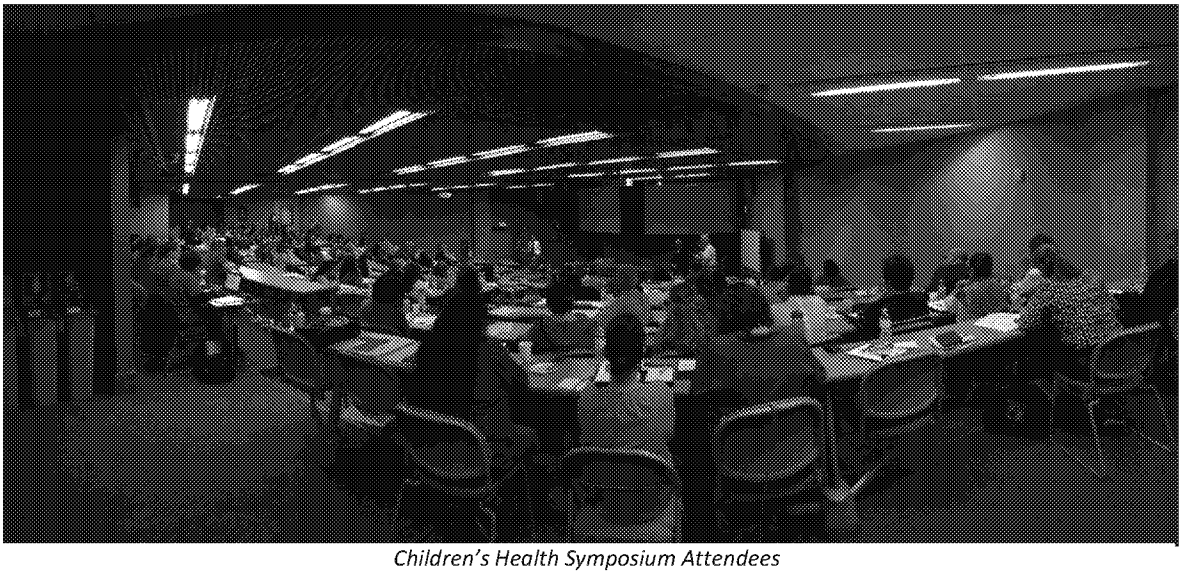
Ron Curry, Region 6 Regional Administrator

The two main goals of the symposium were: 1) to increase knowledge of how early childhood exposure can affect children's health; and 2) to facilitate networking among the healthcare community, promotoras, and the public. More than 150 doctors, nurses, promotoras and public health professionals from Texas, New Mexico and Chihuahua attended the 2-day symposium.

Thirty experts presented on asthma, lead and mercury exposure, climate change impacts on children's health and a dozen other topics. Simultaneous English-Spanish translation was provided for all the presentations. Discussion topics included: climate change impacts on children's health, and prenatal exposures; childhood breathing--healthy lungs and good indoor air quality; e-cigarettes; unconventional petroleum exploration concerns; carbon monoxide; asthma, and lead. Final symposium agenda, presentations, and speaker bios are available for download at the symposium website.

ED_002319B_00013498-00014

Children's Health Symposium Cont'd



Children's Health Symposium Attendees

3-State and 4-State Partner Calls

MONTHLY BORDER PARTNERS CONFERENCE CALL: The El Paso Border Team began in 2006 having monthly calls with Border 2020 Federal and State Co-Chair Border staff in order to keep each of the agencies updated on ongoing border meetings and efforts as they relate to the Border Program. The meetings are held every 2nd Tuesday of month with the Texas Commission on Environmental Quality (TCEQ), the Secretariat of Environment and Natural Resources (SEMARNAT in Spanish), New Mexico Environment Department (NMED), the Secretariat of Urban Development and Ecology for state of Chihuahua (SDUE in Spanish) and Ysleta del Sur Pueblo (YDSP). The conference calls focus on environmental border events in the Texas-New Mexico-Chihuahua (TX-NM-CHIH) region that each agency conducts. As events occur, updates are discussed to better prepare for the event and receive input by the border partners. In the past months, updates that have been discussed include the Border 2020 2-year workplans for the TX-NM-CHIH Regional Workgroup that focused on projects and actions that were completed or will be completed in 2015 through 2016. In addition, border projects funded and their status are shared amongst the group, as well as, any activities that took place as part of these projects. Other discussions included taskforce meetings: the Joint Advisory committee (January and May 2016); New Mexico-Chihuahua taskforce (May 2016); Water Taskforce jointly with Paso del Norte Water taskforce Workshop (May 2016). Ongoing discussion regarding the PROAIRE, air quality management plan for Cuidad Juarez, has been included in each monthly call. Partner meetings that have taken place has included the Bi-national Health Council meetings in El Paso, Texas and Presidio, Texas. In addition, TCEQ hosted their annual Trade Fair in May 2016.

ED_002319B_00013498-00015

3-State and 4-State Partner Calls Cont'd

MONTHLY BORDER PARTNERS CONFERENCE CALL: The El Paso Border Team began in 2015 having monthly calls with Border 2020 Federal and State Co-Chair Border staff of the Texas-Coahuila-Nuevo Leon-Tamaulipas Regional Workgroup (TX-COAH-NL-TAUM RWG) order to keep each of the agencies updated on ongoing border meetings and efforts as they relate to the Border, Kickapoo Traditional Tribe of Texas, the Secretariat of Urban Development and Ecology for state of Tamaulipas (SDUMA in Spanish), Secretariat of Urban Development of State of Coahuila (SEMA), Secretariat of Sustainable Development for State of Nuevo Leon (SPMARN in Spanish), and Border Environmental Cooperation Commission (BECC). The conference calls focus on environmental border events that each agency conducts in the TX-COAH-NL-TAUM region. As events occur, updates are discussed to better prepare for the event and receive input by the border partners. In the past months, updates that have been discussed include the Border 2020 2-year workplans for the TX-COAH-NL-TAUM RWG that focused on projects and actions that were completed or will be completed in 2015 through 2016. In addition, border projects funded and their status are shared amongst the group, as well as, any activities that took place as part of these projects. Other discussions included taskforce meetings: Amistad Taskforce Meeting (March 2016), Falcon Taskforce meeting (March 2016) and Gulf Taskforce meeting (March 2016). BECC staff has provided project details of the Border 2020 projects funded in the region.

ED_002319B_00013498-00016

Border 2020 Projects Funded

The U.S. Environmental Protection Agency (EPA) is awarding more than $521,000 to 14 organizations in Texas, New Mexico and Mexico. The funds will support projects such as conservation, waste collection, water quality protection, recycling expansion, green infrastructure and improving environmental education in the region.

The following organizations received grants:

- **Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C.** – Received $50,000 for sustainable and resilience housing
- **Subsecretaria de Medio Ambiente, Tamaulipas** – Received $20,866 to strengthen solid waste programs
- **Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza** – Received $16,777 for electronic waste recycling
- **City of Harlingen Fire Department** – Received $60,000 to support binational tabletop exercises
- **Instituto Tecnológico de Ciudad Juárez** – Received $43,204 for a green infrastructure and sustainability project
- **Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología** – Received $41,388 for a soil conservation and management project
- **Secretaría de Desarrollo Urbano y Medio Ambiente, Tamaluipas** – Received $9,385 for energy efficient lighting
- **Texas A&M University-Kingsville** – Received $38,885 for storm water improvements
- **Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras** – Received $36,054 for electronic waste recycling
- **The University of Texas at Austin** – Received $58,575 for a water quality improvement initiative
- **Brownsville Public Utilities Board** – Received $25,000 for an educational campaign to help eliminate water discharges
- **Junta de Aguas y Drenaje de Matamoros** - Received $25,000 for an educational campaign to help eliminate water discharges
- **City of Pharr, Recycling Center**- Received $36,390 for a green campaign
- **Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo** – Received $11,000 for Environmental Education and Legislative action reforms

ED_002319B_00013498-00017

Region 6 U.S.-Mexico Border Team

REGIONAL ADMINISTRATOR – Ron Curry

DRA, Coleman , Sam 214-665-3110
R6 U.S. Federal Co-Chair for Border 2020
Blanco, Arturo - OEJTIA Director
EJ, Tribal and International Affairs Office 214-665-3182
Smith, Rhonda – Deputy Director..... 214-665-8006

- **Laura Gomez Rodriguez**- Team Lead, White House Council on SC2 956-578-1547
- **Paula Flores-Gregg,** Texas EJ and Border Liaison 214-665-8123

El Paso Border Office
Main / Public Line 915-533-7273
Fax 915-544-6026
Conference Room ..... ext. 226
VTC 915-532-3410
Border Program 1800#..... 1-800-334-0741
Address: Region 6, El Paso Border Office
4050 Rio Bravo, Suite 100, El Paso, TX 79902
Rincon, Carlos..... ext. 222

- Director, R6 El Paso Border Office, Air Quality, Environmental Compliance Assistance, Texas / Chihuahua Rural Task Forces, and TX/Coahuila/Nuevo Leon / Tamaulipas Task Forces

Sisneros, Maria..... ext. 224

- TX/Coahuila/Nuevo Leon/Tamaulipas Regional Workgroup Liaison
- Water Quality, Emergency Preparedness and Response TF; Environmental Health Task Force; Environmental Education TF for TX/NM/CHIH Regional Workgroup
- Program Communications and Outreach
- Publications and Website

Tellez, Debra ..... ext. 229

- NM/TX/Chih Workgroup Liaison
- Chihuahua / New Mexico Rural TF
- NM-EJ Liaison

Vasquez, Maria ..... ext. 222

- El Paso Border Office Manager

Office of External Affairs
Gray David - Director..... 214-665-2200
Wang, Jonathan 214-665-2296

- Border/EJ Liaison

Vela, Austin 214-665-9792

- Congressional Liaison, NM & TX

Office of Regional Council
Payne Jr., James O 214-665-8170

- Office of Regional Counsel

Witthoeft, Paul M. 214-665-8057

- Assistant Regional Counsel

Multimedia Division (Goals 1 and 3)
Stenger, Wren - Director..... 214-665-6583
Price, Lisa - Deputy Director..... 214-665-6744
Goal 1:Reduce Air Pollution
Hansen, Mark 214-665-7548

- Chair, Joint Advisory Council & Technical Advisor for BECC grants on Air

Goal 3: Promote Materials Management, Recycling and Clean Sites
Bellew, Renee 214-665-2793

- Waste Policy Forum Liaison
- Technical Advisor for BECC grants on Waste

Lawrence, Rob..... 214-665-6580

- Energy and Climate Change

Selzer, Paula 214-665-6663

- Children's Public Health & Technical Advisor for BECC grants on Children's Health

Wilson, Monica 214-665-6719

- Grants Administration

Water Division (Goal 2)
Honker, Bill- Director..... 214-665-3187 **Goal 2: Improve Access to Clean and Safe Water**
Tellez, Gilbert 915-533-7273

- Water Policy Forum Liaison & Technical Advisor for Border Water Infrastructure

Gandara, Salvador 214-665-3194

- Project Officer for BECC, NADB Infrastructure Grant

Ruiz, Thomas 214-665-3153

- Community Outreach Coordinator

Superfund Division (Goal 4)
Edlund, Carl – Director 214-665-8124
Goal 4: Enhance Joint Preparedness for Environmental Response
Todd, Brandi 214-665-2233

- Emergency Preparedness and Response
- Border 2020 Emergency Preparedness and Response Policy Forum Liaison
- Representative on the U.S.-Mexico Joint Response Team & Technical Advisor for BECC grants on Emergency Response

Enforcement Division (Goal 5)
Blevins, John – Director 214-665-2266
Goal 5: Enhance Compliance Assurance & Environmental Stewardship
Potts, Mark 214-665-2723

- Goal 5, Enforcement and Compliance
- Enforcement Group & Technical Advisor for BECC grants Liaison

ED_002319B_00013498-00018

Texas-Coahuila-Nuevo Leon-Tamaulipas Regional Workgroup Co-Chairs & Staff

U.S. Federal Co-Chair Sam Coleman *Regional Deputy Administrator, U.S. EPA* Staff: Carlos Rincon, EPA/Region 6 Border Coordinator, Rincon.Carlos@epa.gov 915-533-7273 Maria Sisneros, EPA Region 6 El Paso Office Sisneros.maria@epa.gov	**Mexican Federal Co-Chair** Lic. Jesús González Macías *Delegate, SEMARNAT Tamaulipas* Horacio del Angel, Subdelegado de Protección al Ambiente y Recursos Naturales, SEMARNAT Tamaulipas 834-318-5254 horaciodelangel@tamaulipas.semarnat.gob.mx
U.S. State Co-Chair Bryan W. Shaw, Ph.D., P.E. *Chairman, Texas Commission on Environmental Quality* Staff: Steve Niemeyer. P.E., Border Affairs Manager and Colonias Coordinator 512-239-3606 *TCEQ- Austin* steve.niemeyer@tceq.texas.gov Claudia Lozano-Clifford, REM., Lead Border Team Coordinator *TCEQ- Harlingen office, Gulf Task Force* 956-430-6035 claudia.lozano@tceq.texas.gov Victor Wong, Border Program Coordinator *TCEQ- Laredo Office, Falcon and Amistad Task Forces* 956-753-4050 victor.wong@tceq.texas.gov Eddie Moderow, Program Coordinator *TCEQ- Austin* 512-239-0218 eddie.moderow@tceq.texas.gov Desiree Ledet, Program Coordinator *TCEQ- Austin* 512-239-6132 desiree.ledet@tceq.texas.gov	**Mexican State Co-Chairs** Ing. Roberto Russildi Montellano, *Secretary of Sustainable Development, State of Nuevo León* Dr. Alfonso Martínez Muñoz, Subsecretario de Proteccion al Medio Ambiente y Recursos Naturales alfonso.martinezm@nuevoleon.gob.mx 812-033-2100 Biól. Eglantina Canales, *Secretary of the Environment, State of Coahuila* Oscar Flores, Subsecretario de Gestion Ambiental 844-698-1091 ext. 7268 oscar.flores@sema.gob.mx Alejandra Carrera, MC., Directora de Conservación 844-698-1098 Alejandra.carrera@sema.gob.mx Ing. Humberto René Salinas Treviño *Secretary of Urban Development and Environment, State of Tamaulipas* 834 107-8615 Ocean. Heberto Cavazos Lliteras, Subsecretario de Medio Ambiente 834-107-8291 Heberto.cavazos@tamaulipas.gob.mx Dra. Silvia Casas Gonzalez Dirección de Transversalidad y Cambio Climático 834-107-8261 silvia.casas757@gmail.com Lic Lucero Chavez 834-1078292 ssma@tamaulipas.gob.mx **Mexican Staff Liaison for Workgroup** Gustavo Pantoja Villarreal, 867-718-6336, 867-727-0486 gustavopantoja@hotmail.com (BECC contractor)

ED_002319B_00013498-00019

TX-COAH-NL-TAUM TASK FORCE CO-LEADERS

	Gulf	Falcon	Amistad
U.S.	John Wood, *Port of Brownsville Commissioner* 956-778-7175 jwarealty@aol.com	Joe Rathmell, *County Judge, Zapata County* 956-765-9920 zcjo@zapatacountytx.org Pete Saenz Jr., Mayor of Laredo, TX 956-791-7389 mayorsaenz@ci.laredo.tx.us Staff: Riazul Mia, 956-721-2000 rmia@ci.laredo.tx.us	Ramsey Cantu, *Mayor of Eagle Pass, TX* Staff: Ivan Morua, 830-773-1111 imorua@eaglepasstx.us
MX	Lic. José Elias Leal, *Presidente Municipal, Reynosa, Tamps.* 899 932-3205 joseeliasleal@reynosa.gob.mx Staff: Arq. Pedro Luis Corte Cruz 899 230-1212 pcortecruz@yahoo.com.mx	Ing. Carlos Canturosas, *Presidente Municipal of Nuevo Laredo, Tamps.* Staff: Arq. Carlos De Anda, 867 109-6643, cdeandah@hotmail.com Vacant	Lic. Ana Gabriela Fernández Osuna, *Alcaldesa de Nava, Coahuila* Staff: Prof. Luz María Menchaca, 877-128-6785 lmmenchaca@hotmail.com

TX-COAH-NL-TAUM COMMITTEE CO-FACILITATORS

	Gulf	Falcon	Amistad
WASTE			
U.S.	Art Rodriguez, *Director of Public Health, Brownsville*, TX 956 542-3437, ext. 6514, art.rodriguez@cob.us	John Porter, *Director of Env. Services, Laredo,* 956-794-1650 jporter@ci.laredo.tx.us	Vacant
MX	Ing. Hector Quiroz Torres, *Director de Ecologia, Reynosa, Tamps* 899 282-4485 hequito1@gmail.com	Ing. Atilano Ramirez, *Consultant, CAREME, Nuevo Laredo,* 867 712-43-06 rasati13@hotmail.com	Ing. Alfredo Lucero, *Director de Ecología, Piedras Negras,* 878 782-6666 or 878 789-9419, aalm68@hotmail.com
WATER			
U.S.	Joe Hinojosa Santa Cruz Irrigation District # 15 956-383-3441 josehinojosa290@gmail.com jhinojosa80@yahoo.com	José Garza, *Frank Tejeda Center,* 956-326-2896 jose.garza@teexmail.tamu.edu	No committee
MX	Ing. David Negrete, CILA-Reynosa	Agustin Boone, *CILA,* 867 713-49-73 aboone@cila.gob.mx	No committee
ENVIRONMENTAL EDUCATION AND HEALTH			
U.S.	Beatriz Tapia, MD, *UT Health Science Center*, 956-365-8820 tapiab@uthscsa.edu Genny Carrillo, MD Texas A&M Health McAllen (956 668-6321 gcarrillo@sph.tamhsc.edu	Dr. Hector Gonzalez, *Laredo Health Department*, 956-795-4922 hgonzalez@ci.laredo.tx.us Ivan Santoyo, *Laredo Environmental Services*, 956-794-1650 isantoyo@ci.laredo.tx.us	Dr. Antonio Garza, *Kickapoo Tribe of Texas*, 830-421-5364 antonio.garza@kttribe.org
MX	Ing. Alfredo Hassanille, *Asociación de Maquiladoras, Matamoros*, 868-125-0218 alfredo.a.hassanille@gmail.com	Ing. Marco Garza, *Universidad Tecnológica de Nuevo Laredo,* 867 789-00-0000 ext. 112, utnl_mgarza@hotmail.com or dirvinc@utnuevolaredo.edu.mx	Ing. Victor Manuel Ibarra, Instituto Tecnológico de Piedras Negras, 878 783-0135 ing_victor_m@prodigy.net.mx
EMERGENCY PREPAREDNESS			
U.S.	Ricardo Saldaña, *Hidalgo Co. EMC* 956- 318-9615 ricardo.saldana@co.hidalgo.tx.us	Steve Landin, *Fire Chief, City of Laredo*, 956-795-2150 slandin@ci.laredo.tx.us	Manuel Mello, *Fire Chief, City of Eagle Pass*, 830-757-2698 mmello@eaglepasstx.us
MX	Ing. Manuel Montiel, *CLAM Matamoros, AMMAC* 868 8137938 or 868 9076414 *Manuelmontiel46@hotmail.com*	Ing. Juan Pablo Villarreal, *Universidad Autonoma de Tamaulipas,* 867-113-0682 juano_reyes@yahoo.com	Brigido Iván Moreno, Director de Protección Civil de Acuña, 877 888-2106 proteccioncivilacuna@gmail.com

ED_002319B_00013498-00020

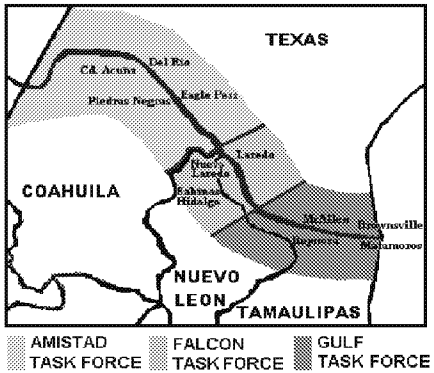
2016 Texas-New Mexico-Chihuahua Regional Work Group Contacts Co-Chairs

	Name	Organization	Phone	Email	Support Staff	Phone
U.S. Federal	Sam Coleman, Deputy Regional Administrator	EPA	214-665-6701	coleman.sam@epa.gov	Debra Tellez: tellez.debra@epa.gov	915-533-7273
U.S. State New Mexico	R.C. Flynn, Secretary	NMED	505-827-2855	Ryan.flynn@state.nm.us	Butch Tongate Butch.tongate.state.nm.us	505-827-2855
U.S. State Texas	Bryan W. Shaw, Chairman	TCEQ	512-239-5515	Curtis Seaton (for appts/mtgs): Curtis.seaton@tceq.texas.gov	Steve Niemeyer: steve.niemeyer@tceq.state.gov Gina Posada: eugenia.posada@tceq.texas.gov	512-239-3606 915.834.4977
Mexico Federal	Brenda Rios Prieto	SEMARNAT	011-52-614-442-1501	brenda.rios@ semarnat.gob.mx	Gerardo Tarín gerardo.tarin@semarnat.gob.mx	011-52-616-6687
Mexico State Chihuahua	Arq. Nieves Maloof Secretary	SDUE	011-52-614-415-7514		Alfredo Ruiz Coughanour magofenk@hotmail.com	011-52-614-429-3627
US TRIBE	Frank Paiz, Governor	Ysleta del Sur Pueblo	915-859-8053	fpaiz@ydsp-nsn.gov	Evaristo Cruz ecruz@ydsp-nsn.gov	915-859-7913

	Task Force Co-leaders	Country	Co-Leader	Organization	Phone	Email
1	**Goal 1: Air** Objetivo 2: Aire	MX	Dra. Alba Yadira Corral	Universidad Autónoma de Cd. Juárez UACJ	01152-656-688-1885	acorral@uacj.mx
		US	Dr. Wen-Whai Li	University of Texas at El Paso	915-747-8755	wli@utep.edu
2	**Goal 2: Water** Objetivo 1: Agua	MX	Dr. René Franco Barreno	Paso del Norte Water Task Force	656-611-1947 656-611-4989	rfranco@francoyasociados.com
		US	Lorenzo Arriaga	Paso del Norte Water Task Force	915- 449-5479	lrnzrrg034@gmail.com
3	**Goal 3: Waste Objetivo 3: Residuos**	MX	René Franco Ruiz	Franco & Associates	011152656-616-6609	renefranco@francoyasociados.com
		US	Cristina Viesca-Santos	El Paso County District Attorney's Office	915-546-2050	Cristina.Viesca@ca.epcounty.com
4	**Goal 4: Emergency Response Objetivo 5: Emergencias Ambientales**	MX	Efren Matamoros	Protección Civil	1656-318-4948	licmadominguez@hotmail.com Mabe71@hotmail.com
		US	VACANT			
5	**Goal 5: Compliance Assistance Objetivo 6: Cumplimiento de Ley**	MX	Lic. Joel Aranda	PROFEPA	011-52-656-682-39-90, ext 18253	jaranda@profepa.gob.mx
		US	Pamela Aguirre			
6	**Environmental Health Salúd Ambiental**	MX	Dr. Enrique Suárez y Toriello	FEMAP	656-616-0833	esuareztoriello@msn.com esuarez@femap.org
		US	Bruce Sanfilippo	Memorial Medical Center	575-521-2218	Bruce.Sanfilippo@ipnt.net
7	**Environmental Education Educación Ambiental**	MX	Lic. Claudia Janet Laffont Castañón	Directora de Aqua 21, A.C	656-616-5228 656-613-1800	aqua21ac@gmail.com aqua21@prodigy.net.mx m
		US	Patricia Juarez	University of Texas at El Paso-CERM	915-747-7976	pjuarez@utep.edu
8	**Chihuahua / New Mexico Task Force**	MX	Ing Martin Palomares	Desarrollo Urbano y Ecologia Acension, Chih	636-112-5145	impcera@gmail.com
		US	**VACANT**			
9	**Chihuahua / Texas Task Force**	MX	Miquel Antonio Carreon Rohana	Presidente Municipal, Ojinaga, Chih.	626-453-0304	Chacuaco70@hotmail.com
		US	Cindy Guevarra	County Judge, Presidio	432-729-4452	eljuez@att.net

ED_002319B_00013498-00021

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup
September 2015



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical extension and the number of municipalities. The region includes parts of three states and a total of at least 29 municipalities on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2015, the three task forces held meetings to discuss initial priorities for the 2015-2016 Action Plan. Several conference calls with leaders were held in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side
    c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal:

4. Assist communities to build capacity for waste streams: by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets

ED_002319B_00013525-00001

5. Expand environmental education related to waste issues

6. Enhance Joint Preparedness for Environmental Response
    a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills in the.
    b. Coordinate emergency preparedness response table top exercise or field exercises.

7. Develop a certified environmental health curriculum to train border community health workers and promotoras on lead, mercury, pesticides, and other heavy metals

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitoring of drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalizing the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets(such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop a diagnostic study on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs.
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias
5. Healthy Homes training for promotoras along the GTF' US-MX border

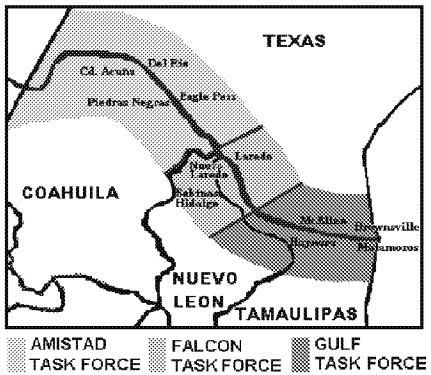
ED_002319B_00013525-00002

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures.							
1.1.01	**Characterization of Drayage Activities & Emissions Laredo-Nuevo Laredo Airshed** Develop a detailed characterization of the drayage activity in the Laredo-Nuevo Laredo region and its air quality implications.	Texas A&M Transportation Institute	$89,750 US Dollar	Border 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Gather activity information on drayage vehicles to estimate their emissions impacts in the Laredo and Nuevo Laredo airshed.	TTI obtained permissions by the EPA, BECC and the Texas A&M IRB to collect GPS data from drayage vehicles operating in the Laredo-Nuevo Laredo region. TTI recruited 20 drayage truck operators and collected GPS data. TTI staff are analyzing the data and determining the emission impact of the trucks.

ED_002319B_00013525-00003

1.1.02	**Emissions from Long Haul MX Diesel Trucks in Laredo-San Antonio Corridor** Survey diesel truck activity and evaluate typical Mexican diesel truck emissions along Laredo-San Antonio Corridor.	Texas A&M Transportation Institute	$100,000 US Dollar	EPA, TCEQ	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Collecting and analyzing data. TTI will present findings and report in August.	The project is complete. In August a final report was submitted to TCEQ with findings and is currently under review.
Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to quality data.							
1.3.01	**Update the Ecological Program Code for the Region Cuenca de Burgos, Tamaulipas**	SEDUMA Tamaulipas	$2 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a Monitoring and Evaluating System for the most relevant environmental Indicators, considering performance, defining measurements that allow one to track the strategy's effectiveness and the code's defined policies.	The project is in the process of being updated by a hired external consultant that will perform modifications to the current code.
Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States, and build the necessary capacity to guarantee sustained implementation.							
1.4.01	**Municipal Climate Action Plan of San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	$ 2.199 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a public policy planning instrument for the development of strategies and actions to mitigate greenhouse gas	This project is undergoing administrative procedures to execute the awarded budget. The municipality of San Fernando will oversee the project and has State support for

						emissions. Reduce municipal vulnerability to climate change by enhancing adaptability.	the validation of reference terms and the respective technical annex.
1.4.02	**Tamaulipas State Climate Change Program**	SEDUMA Tamaulipas	$200,000 US Dollar	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Update the greenhouse gas emissions inventory and develop the program's climate change adaptation agenda.	An external consultant will develop the project. The update to the inventory has been completed. Currently both the Adaptation Agenda is being developed and the integration of both components. The deadline is November 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects.							
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila: Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000 US Dollar	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	The project is currently in the Microeconomic and Public Policy Phase for Coahuila State. Meetings have been held with the Technical Working Groups, the Advisory Group, and the Climate Change Committee.
1.5.02	**Air Quality Network in Coahuila** Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipalities of Piedras Negras, Acuña, Nava, Sabinas, Saltillo	$12 Million Pesos MX	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila.	The project has been authorized and is in the revision phase prior to bidding.

1.5.03	**Tamaulipas Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$300,000 US Dollar	BECC, BID	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired. They are working on the agenda, updating the emissions inventory, and the integration of both components.
1.5.04	**Atmospheric Monitoring System** Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA Tamaulipas	Annually: $ 250,000 Pesos MX ($150,000 Municipal & $100,000 State)	SEDUMA, City Council of Matamoros	Biol. Jorge Garcia, jgarciah@tamaulipas.gob.mx 834 1078291	By 2014, the system will operate at 100% with programmatic consistency standards.	Currently four of the eight municipalities have their air monitoring network in operation (01 Nuevo Laredo, 02 in Victoria, 01 in Madero and 01 Tampico). The operation site for the four monitors located in Matamoros for the last trimester of 2015 is being managed.
1.5.05	**Green Infrastructure Workshop**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Train municipalities on Green infrastructure.	Two workshops were held. One on April 21, 2015 in which 5 municipalities from the Southeast region attended and a second workshop on May 27, 2015 that was attended by 10 municipalities from the Central and Desert regions. The state workshop will occur in the final trimester of 2015.

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	**Upgrade Sewer Line Infrastructure Nuevo Laredo** Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5 Million US Dollar	NADB	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Complete the project by January 2015.	The BECC certified the project in September of 2012. Of the five sewer lines one was completed during the first half of 2014. The remaining four lines are under repair and discharge approximately 1.6 MGD to the fluvial water system. Another discharge point was identified by COMAPA in the Arroyo La Joya and will be repaired.
2.2.02	**Management of Fats, Oils, and Grease Nuevo Laredo** Reduce the concentration of fats, oils, and grease in the effluent water coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo León.	$32,533 US Dollar	Border 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Hold workshops and follow-up with commercial establishments on implementation of FOG programs	COMAPA organized workshops with the support of students from the Technical University to educate commercial establishments and residents on best practices. The last workshop was held in August of 2015 that included a tour of the International Waste Water Treatment Plant. All the establishments that participated in the workshops have grease traps and are applying control and operating techniques. COMAPA is drafting the final project report.

2.2.03	**Ideal Biological Filtration Material South Texas Storm Management** Identify the best locally available material for use in bio-swale in the Lower Rio Grande Valley & South TX.	University of Texas Pan American	$26,022 US Dollar	Border 2020	Jungseok Ho, Ph.D. University of Texas Rio Grande Valley, jungseok.ho@utrgv.edu (956) 665-3104	The proto-type bioswale will be tested in a newly constructed parking lot on the campus of UT Pan American.	The recycled ground recycled glass of medium porosity demonstrated good hydrologic performance in the biological filtration process.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	**Removal of Invasive Plants** Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Slim Foundation	$1.5 Million Pesos MX Annually	SEMA (Coahuila), CONANP, Profauna WWF, Slim Foundation	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Plant Control: 2014: Tamarix 34 ha & Carrizo 40 ha; 2015 Tamarix 34 ha and Carrizo 40 ha; 2016: Tamarix 34 ha and Carrizo 40 ha.	Since 2014 PROFAUNA and CONANP with the support of WWF and the Slim Foundation have annually protected 34 hectares from the Tamix plant and 40 hectares from Carrizo. To date they have continue to protect the same quantity of land and it is anticipated that they will maintain this amount in 2016.
2.3.02	**Conservation of Las Vacas Stream** Design and implement actions to improve water quality and promote an adequate habitat for flora and fauna species in the Arroyo Las Vacas.	Ciudad Acuna Department of Environment, SEMA Coahuila	$44,200 US Dollar	Border 2020	Lic. Alejandra Carrera, Secretaria de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implement actions to improve water quality and promote an adequate habitat for flora and fauna species in Las Vacas stream.	Progress has been made regarding the Arroyo Las Vacas diagnostic, water quality monitoring, and identification and detection of disputes through a ITSA-UT Austin Knowledge Exchange. A presentation of the project was presented at the Environmental Trade Fair in May 2015. In November, a training is scheduled regarding bi-national water quality, data comparison, and water sampling.

2.3.03	**Lower Rio Grande Binational Water Quality Initiative (LRGWQI)** Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan ,TCEQ, 512-239-2369, Kelly.holligan@tceq.texas.gov	Implement actions to improve water quality and promote an adequate habitat for flora and fauna in the Arroyo Las Vacas.	In March the LRGWQI's Binational Technical Work Group conducted the first of four binational synoptic water quality surveys scheduled for the project. They also developed a preliminary input file for a steady-state water quality model of the Rio Grande/Río Bravo (Falcon Dam to Gulf of Mexico).

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**Environmental Education Program Nuevo Laredo** Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America Beautiful.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipality of Nuevo Laredo		City of Laredo Environmental Services local partners, and Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establish an environmental organization affiliated with Keep America Beautiful by 2016.	Keep Laredo Beautiful will be meeting with officials of the Technological University of Nuevo Laredo in August to discuss the project and inquire about their interest in establishing an environmental organization through Keep America Beautiful. Keep Laredo Beautiful has committed to pay membership fees for one year for the organization to be affiliated with Keep America Beautiful.
3.1.02	**Characterization Municipal Solid Waste Stream & Diagnosis Regarding**	SDS Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000 US Dollar	Border 2020, BECC	Norma Rangel Sevilla, SDS, Nuevo León, normaarangel@gmail.co	Analyze the generation of solid and "special	Project completed. The study was finalized in June 2015. More details of the study will be

	Generation/Management of Waste Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo León.				m 0115281 20 33-19-38	management" of six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	provided at a later date.
3.1.03	**Operation of an Electronic and Household Hazardous Waste Stockpile Center**	Municipality of Nuevo Laredo, Tamaulipas	$3.626 Million Pesos MX	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Develop a municipal infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	The installations are finished. Only authorization from SEMARNAT is needed for operation, which is underway. It is possible for operations to commence in the last trimester of the year.
3.1.04	**Environmental Code for the Disposal of Construction Waste**	Municipality of Nuevo Laredo, Tamaulipas	The project is funded through money paid by residents for the management and processing of waste.	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretariat of Public Works, Urban Development & the Environment, cdeandah@hotmail.com	Generate an alternative for the community for the disposal of construction waste and mitigate clandestine dumping.	This project has operated continually and generated an important impact to the community. 123 pesos per cubic meter are paid when the waste is no greater than 2 cubic meters. If it is three to ten cubic meters the service cost 88 pesos. If it exceeds 10 cubic meters, in order to leave the program, 100 pesos are charged per cubic meter.
3.1.05	**Clean-up Campaign Keep Pharr Beautiful** Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.	Public Works Department, City of Pharr	$20,000 US Dollar	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Reduce illegal dumping in residential and industrial sectors and encourage residents to take	The project has ended and the majority of their objectives were attained. Various public awareness events monthly clean-ups were organized. A workshop was organized for the

						responsibility for the beatification of their communities.	community about the reduction of clandestine dumping. The City plans to continue clean-up campaigns and environmental education activities.
3.1.06	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838 US Dollar	Border 2020	Melissa Gonzales, City of Alamo	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Various presentations were organized in 12 different locations in different schools that reached 700 students. Bilingual signs about not littering were posted.
3.1.07	**Clean-up of Urban Solid Waste Disposal Site in Guerrero Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	$3.169 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Legalize and encourage compliance to NOM-083-SEMARNAT-2003, referring to the closing of disposal sites.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.
3.1.08	**Construction and Equipping of the First Phase of Type A Landfill in Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	$19.359 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Have adequate modern infrastructure for the final disposal of urban solid waste.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.

3.1.09	**Construction and Equipping of Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz y Sabinas	$25 Millones Pesos MX	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Conduct land studies. Under analysis before request for bids.
3.1.10	**Construction and Equipping of Inter-municipal Landfill in the Municipalities of Juarez and Progreso, Coahuila**	SEMA, Municipality of Juárez y Progreso	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.11	**Construction and Equipping of Urban Solid Waste Residual Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.12	**RECOLECTRÓN Program** Recollection program for electronic waste within the municipalities.	SEMA, Municipalities Acuña, Allende, Nava y Sabinas	$2 Million Pesos MX	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	In 2015 collect 44.91 tons of waste. In 2016 collect 56.14 tons of waste.	To date 44.89 tons of waste has been collected.
3.1.13	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Utilizing three cuts volume and the accumulation of water which are breeding grounds for mosquitos (vectors for dengue fever) are reduced.	Municipality of Acuña, Coahuila	$12,000 US Dollar	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx	Develop a municipal infrastructure for stockpiling, managing, and disposing of scrap tires.	There is a regulatory framework that regulates management and a program underway for stockpiling, but an infrastructure is required for final disposal.
3.1.14	**Disposal of Electronic and Hazardous**	Municipality of Acuña, Coahuila	$12,500 US Dollar	Municipality of Acuña	Biol. Carlos Alejandro Flores Diego, Director de Ecología,	Develop a municipal	The regulatory framework was approved as well as an alteration

	Waste Create a stockpile center for the special management of waste, in which			Coahuila.	floresdiegocarlos@yahoo.com.mx	infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	to municipal regulations regarding the environment to approve an operating license for 6 months and certification of training workshops. Partnership with CECART#197 for certification.
3.1.15	**Scrap-Tire Management Program** Design and implement a state scrap-tire management program that includes valuation.	SEDUMA Tamaulipas	$ 400 Million Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Work with cities located on the northern border of the State to regulate a temporary stockpile system for used tires.	The State authorized the business, ECONEU of Reynosa, to operate the Recycle Plant and Scrap Tire Processor, of which they anticipate to break down 100,000 scrap tires annually.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	**Update Cross-Border Contingency Plan** Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.	Laredo Fire Department, Civil Protection of Nuevo Laredo, and CILA, CODEFRONT, and the City of Laredo		EPA, COCEF, PROFEPA, and Protección Civil	Steve Landin, Laredo Fire Department, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa, Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com 01152867 712-46-35	Hold new meetings of the staff of the two cities in order to revisit the language of the draft revision and possibly develop alternative language and include Colombia in the plan.	The project is on hold because city council has not approved changes to language of the draft revision, intending to clarify that Laredo could not send personnel to respond to incidents across the border, but could assist in other ways.

4.2.02	**Hazardous Materials First Responders Binational Training in McAllen-Mission-Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Fire department	$75,000 US Dollar	Border 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540	Hold a System and Incident Command Training with firemen from McAllen, Mission, Pharr, and Reynosa.	The Fire Department in McAllen will coordinate and hold the workshop at the end of August.

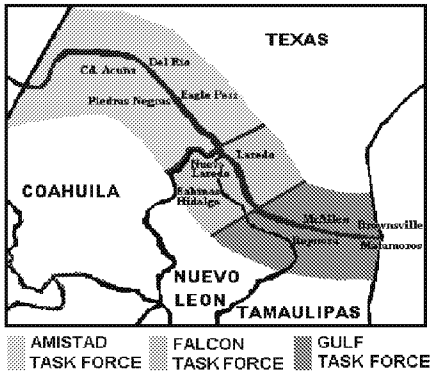
Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Urban Forest Piedras Negras**	SEMA, Municipio de Piedras Negras, SEMARNAT	$ 15 Million Pesos MX	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Construct an urban forest in the city of Piedras Negras the size of 15 hectares.	Ninety-four percent of the project is complete.
6.0.02	**Strengthening School Networks and Global Climate Change Surveillance "Casa de Tierra"**	SEDUMA, Gobierno Municipal de Reynosa.	$ 66 Million Pesos MX	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Build, equip, and operate 3 "Casa de Tierra" to attend to the population in the northern, central, and southern areas of the State. 160 visitors annually.	CDT Victoria operating since December of 2013. CDT Reynosa operating since January 2015. CDT Madero in the final phase of construction.
6.0.03	**Extension of Environmental Management Systems Program** Extend Tamaulipas' state program in promoting environmental management	SEDUMA Tamaulipas	$ 300,000 Pesos MX	SEDUMA, Empresas IP, Participants	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SIMA enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a

	systems (SIMA) to more schools and government offices.						total of 26,000 students. Schools received equipment. SIMA trained 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs.
6.0.04	**Planning of Health & Environmental Information Model Along TX-MX Border** The development of a conceptual framework for a bi-national environmental and health information repository.	El Colegio de la Frontera del Norte	$39,875 US Dollar	Border 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identify required tools and capacities, compare existing systems, identify and recommend training or educational needs, and develop an indicator system to measure environmental health.	A theoretical framework in order to identify information on health and the environment was developed. Different key contacts were interviewed. Information was obtained about health and environmental indicators through the elaboration of Memorandums of Understanding between academic institutions involved in the project and the respective Secretariats of Health and the Environment from Coahuila State.
6.0.05	**Promotora-Led Environmental Health Education for Children** 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 heath promotoras, who subsequently will provide educational information in elementary schools, child care settings and to colonia residents.	La Amistad AHEC and Southwest Border AHEC	$69,083 US Dollar	Border 2020	Rosa Elvira Martinez, Southwest Area Border Health Education Center, rose.martinez@swbahec.org (830) 758-1111	Conduct training and provide educational information on pesticide awareness to elementary schools and homes in colonias.	As of July, promotoras had conducted visits to two elementary schools and one head start to educate children on hazards related to pesticide exposure and household chemicals. Promotoras also conducted training on pesticide awareness in more than 30 homes and post-assessments in seven homes, with 23 of them expected to be evaluated in the fall of 2015.

ED_002319B_00013525-00015

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup
September 2015



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical extension and the number of municipalities. The region includes parts of three states and a total of at least 29 municipalities on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2015, the three task forces held meetings to discuss initial priorities for the 2015-2016 Action Plan. Several conference calls with leaders were held in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side
    c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal:

4. Assist communities to build capacity for waste streams: by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets

ED_002319B_00013528-00001

5. Expand environmental education related to waste issues

6. Enhance Joint Preparedness for Environmental Response
    a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills in the.
    b. Coordinate emergency preparedness response table top exercise or field exercises.

7. Develop a certified environmental health curriculum to train border community health workers and promotoras on lead, mercury, pesticides, and other heavy metals

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitoring of drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalizing the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets(such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop a diagnostic study on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs.
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias
5. Healthy Homes training for promotoras along the GTF' US-MX border

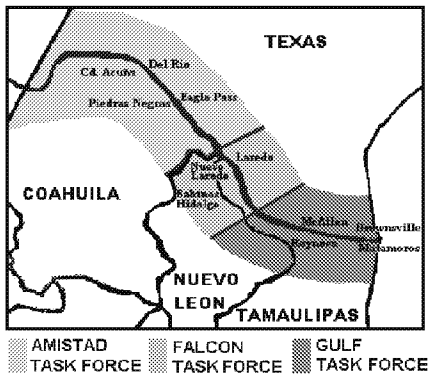
ED_002319B_00013528-00002

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**Environmental Education Program Nuevo Laredo** Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America	Keep Laredo Beautiful, Keep America Beautiful, and the Municipality of Nuevo Laredo		City of Laredo Environmental Services local partners, and Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establish an environmental organization affiliated with Keep America Beautiful by 2016.	Keep Laredo Beautiful will be meeting with officials of the Technological University of Nuevo Laredo in August to discuss the project and inquire about their interest in establishing an environmental

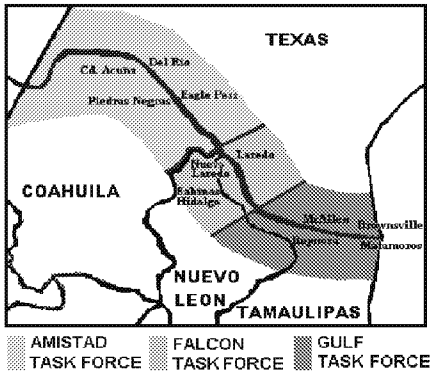
	Beautiful.						organization through Keep America Beautiful. Keep Laredo Beautiful has committed to pay membership fees for one year for the organization to be affiliated with Keep America Beautiful.
3.1.02	**Characterization Municipal Solid Waste Stream & Diagnosis Regarding Generation/Management of Waste** Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo León.	SDS Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000 US Dollar	Border 2020, BECC	Norma Rangel Sevilla, SDS, Nuevo León, normaarangel@gmail.com 0115281 20 33-19-38	Analyze the generation of solid and "special management" of six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	Project completed. The study was finalized in June 2015. More details of the study will be provided at a later date.
3.1.03	**Operation of an Electronic and Household Hazardous Waste Stockpile Center**	Municipality of Nuevo Laredo, Tamaulipas	$3.626 Million Pesos MX	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Develop a municipal infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	The installations are finished. Only authorization from SEMARNAT is needed for operation, which is underway. It is possible for operations to commence in the last trimester of the year.
3.1.04	**Environmental Code for the Disposal of Construction Waste**	Municipality of Nuevo Laredo, Tamaulipas	The project is funded through money paid by residents for the	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretariat of Public Works, Urban Development & the Environment, cdeandah@hotmail.com	Generate an alternative for the community for the disposal of construction waste and	This project has operated continually and generated an important impact to the community. 123 pesos per cubic meter are paid when the waste

			management and processing of waste.			mitigate clandestine dumping.	is no greater than 2 cubic meters. If it is three to ten cubic meters the service cost 88 pesos. If it exceeds 10 cubic meters, in order to leave the program, 100 pesos are charged per cubic meter.
3.1.05	**Clean-up Campaign Keep Pharr Beautiful** Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.	Public Works Department, City of Pharr	$20,000 US Dollar	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Reduce illegal dumping in residential and industrial sectors and encourage residents to take responsibility for the beatification of their communities.	The project has ended and the majority of their objectives were attained. Various public awareness events monthly clean-ups were organized. A workshop was organized for the community about the reduction of clandestine dumping. The City plans to continue clean-up campaigns and environmental education activities.
3.1.06	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838 US Dollar	Border 2020	Melissa Gonzales, City of Alamo	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Various presentations were organized in 12 different locations in different schools that reached 700 students. Bilingual signs about not littering were posted.
3.1.07	**Clean-up of Urban Solid Waste Disposal Site in Guerrero Tamaulipas**	SEDUMA, Municipio de Guerrero,	$3.169 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.co	Legalize and encourage	Project was certified by SEMARNAT and the documentation regarding

		Tamaulipas			m	compliance to NOM-083-SEMARNAT-2003, referring to the closing of disposal sites.	adjudication of resources is in progress.
3.1.08	**Construction and Equipping of the First Phase of Type A Landfill in Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	$19.359 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Have adequate modern infrastructure for the final disposal of urban solid waste.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.
3.1.09	**Construction and Equipping of Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz y Sabinas	$25 Millones Pesos MX	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Conduct land studies. Under analysis before request for bids.
3.1.10	**Construction and Equipping of Inter-municipal Landfill in the Municipalities of Juarez and Progreso, Coahuila**	SEMA, Municipality of Juárez y Progreso	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.11	**Construction and Equipping of Urban Solid Waste Residual Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.

3.1.12	**RECOLECTRÓN Program** Recollection program for electronic waste within the municipalities.	SEMA, Municipalities Acuña, Allende, Nava y Sabinas	$2 Million Pesos MX	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	In 2015 collect 44.91 tons of waste. In 2016 collect 56.14 tons of waste.	To date 44.89 tons of waste has been collected.
3.1.13	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Utilizing three cuts volume and the accumulation of water which are breeding grounds for mosquitos (vectors for dengue fever) are reduced.	Municipality of Acuña, Coahuila	$12,000 US Dollar	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx	Develop a municipal infrastructure for stockpiling, managing, and disposing of scrap tires.	There is a regulatory framework that regulates management and a program underway for stockpiling, but an infrastructure is required for final disposal.
3.1.14	**Disposal of Electronic and Hazardous Waste** Create a stockpile center for the special management of waste, in which	Municipality of Acuña, Coahuila	$12,500 US Dollar	Municipality of Acuña Coahuila.	Biol. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx	Develop a municipal infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	The regulatory framework was approved as well as an alteration to municipal regulations regarding the environment to approve an operating license for 6 months and certification of training workshops. Partnership with CECART#197 for certification.
3.1.15	**Scrap-Tire Management Program** Design and implement a state scrap-tire management program that includes valuation.	SEDUMA Tamaulipas	$ 400 Million Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Work with cities located on the northern border of the State to regulate a temporary stockpile system for used tires.	The State authorized the business, ECONEU of Reynosa, to operate the Recycle Plant and Scrap Tire Processor, of which they anticipate to break down 100,000 scrap tires annually.

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup
September 2015



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical extension and the number of municipalities. The region includes parts of three states and a total of at least 29 municipalities on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2015, the three task forces held meetings to discuss initial priorities for the 2015-2016 Action Plan. Several conference calls with leaders were held in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side
    c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal:

4. Assist communities to build capacity for waste streams: by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets

ED_002319B_00013533-00001

5. Expand environmental education related to waste issues

6. Enhance Joint Preparedness for Environmental Response
    a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills in the.
    b. Coordinate emergency preparedness response table top exercise or field exercises.

7. Develop a certified environmental health curriculum to train border community health workers and promotoras on lead, mercury, pesticides, and other heavy metals

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitoring of drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalizing the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets(such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop a diagnostic study on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs.
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias
5. Healthy Homes training for promotoras along the GTF' US-MX border

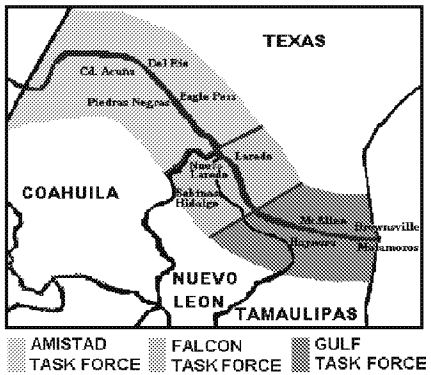
ED_002319B_00013533-00002

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures.							
1.1.01	**Characterization of Drayage Activities & Emissions Laredo-Nuevo Laredo Airshed** Develop a detailed characterization of the drayage activity in the Laredo-Nuevo Laredo region and its air quality implications.	Texas A&M Transportation Institute	$89,750 US Dollar	Border 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Gather activity information on drayage vehicles to estimate their emissions impacts in the Laredo and Nuevo Laredo airshed.	TTI obtained permissions by the EPA, BECC and the Texas A&M IRB to collect GPS data from drayage vehicles operating in the Laredo-Nuevo Laredo region. TTI recruited 20 drayage truck operators and collected GPS data. TTI staff are analyzing the data and determining the emission impact of the trucks.

ED_002319B_00013533-00003

1.1.02	**Emissions from Long Haul MX Diesel Trucks in Laredo-San Antonio Corridor** Survey diesel truck activity and evaluate typical Mexican diesel truck emissions along Laredo-San Antonio Corridor.	Texas A&M Transportation Institute	$100,000 US Dollar	EPA, TCEQ	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Collecting and analyzing data. TTI will present findings and report in August.	The project is complete. In August a final report was submitted to TCEQ with findings and is currently under review.
Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to quality data.							
1.3.01	**Update the Ecological Program Code for the Region Cuenca de Burgos, Tamaulipas**	SEDUMA	$2 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a Monitoring and Evaluating System for the most relevant environmental Indicators, considering performance, defining measurements that allow one to track the strategy's effectiveness and the code's defined policies.	The project is in the process of being updated by a hired external consultant that will perform modifications to the current code.
Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States, and build the necessary capacity to guarantee sustained implementation.							
1.4.01	**Municipal Climate Action Plan of San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	$ 2.199 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a public policy planning instrument for the development of strategies and actions to mitigate greenhouse gas	This project is undergoing administrative procedures to execute the awarded budget. The municipality of San Fernando will oversee the project and has State support for

						emissions. Reduce municipal vulnerability to climate change by enhancing adaptability.	the validation of reference terms and the respective technical annex.
1.4.02	**Tamaulipas State Climate Change Program**	SEDUMA Tamaulipas	$200,000 US Dollar	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Update the greenhouse gas emissions inventory and develop the program's climate change adaptation agenda.	An external consultant will develop the project. The update to the inventory has been completed. Currently both the Adaptation Agenda is being developed and the integration of both components. The deadline is November 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects.							
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila: Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000 US Dollar	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	The project is currently in the Microeconomic and Public Policy Phase for Coahuila State. Meetings have been held with the Technical Working Groups, the Advisory Group, and the Climate Change Committee.
1.5.02	**Air Quality Network in Coahuila** Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipalities of Piedras Negras, Acuña, Nava, Sabinas, Saltillo	$12 Million Pesos MX	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila.	The project has been authorized and is in the revision phase prior to bidding.

ED_002319B_00013533-00005

1.5.03	**Tamaulipas Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$300,000 US Dollar	BECC, BID	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired. They are working on the agenda, updating the emissions inventory, and the integration of both components.
1.5.04	**Atmospheric Monitoring System** Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA Tamaulipas	Annually: $ 250,000 Pesos MX ($150,000 Municipal & $100,000 State)	SEDUMA, City Council of Matamoros	Biol. Jorge Garcia, jgarciah@tamaulipas.gob.mx 834 1078291	By 2014, the system will operate at 100% with programmatic consistency standards.	Currently four of the eight municipalities have their air monitoring network in operation (01 Nuevo Laredo, 02 in Victoria, 01 in Madero and 01 Tampico). The operation site for the four monitors located in Matamoros for the last trimester of 2015 is being managed.
1.5.05	**Green Infrastructure Workshop**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Train municipalities on Green infrastructure.	Two workshops were held. One on April 21, 2015 in which 5 municipalities from the Southeast region attended and a second workshop on May 27, 2015 that was attended by 10 municipalities from the Central and Desert regions. The state workshop will occur in the final trimester of 2015.

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	**Upgrade Sewer Line Infrastructure Nuevo Laredo** Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5 Million US Dollar	NADB	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Complete the project by January 2015.	The BECC certified the project in September of 2012. Of the five sewer lines one was completed during the first half of 2014. The remaining four lines are under repair and discharge approximately 1.6 MGD to the fluvial water system. Another discharge point was identified by COMAPA in the Arroyo La Joya and will be repaired.
2.2.02	**Management of Fats, Oils, and Grease Nuevo Laredo** Reduce the concentration of fats, oils, and grease in the effluent water coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo León.	$32,533 US Dollar	Border 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Hold workshops and follow-up with commercial establishments on implementation of FOG programs	COMAPA organized workshops with the support of students from the Technical University to educate commercial establishments and residents on best practices. The last workshop was held in August of 2015 that included a tour of the International Waste Water Treatment Plant. All the establishments that participated in the workshops have grease traps and are applying control and operating techniques. COMAPA is drafting the final project report.

2.2.03	**Ideal Biological Filtration Material South Texas Storm Management** Identify the best locally available material for use in bio-swale in the Lower Rio Grande Valley & South TX.	University of Texas Pan American	$26,022 US Dollar	Border 2020		The proto-type bioswale will be tested in a newly constructed parking lot on the campus of UT Pan American.	The recycled ground recycled glass of medium porosity demonstrated good hydrologic performance in the biological filtration process.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	**Removal of Invasive Plants** Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Slim Foundation	$1.5 Million Pesos MX Annually	SEMA (Coahuila), CONANP, Profauna WWF, Slim Foundation	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Plant Control: 2014: Tamarix 34 ha & Carrizo 40 ha; 2015 Tamarix 34 ha and Carrizo 40 ha; 2016: Tamarix 34 ha and Carrizo 40 ha.	Since 2014 PROFAUNA and CONANP with the support of WWF and the Slim Foundation have annually protected 34 hectares from the Tamix plant and 40 hectares from Carrizo. To date they have continue to protect the same quantity of land and it is anticipated that they will maintain this amount in 2016.
2.3.02	**Conservation of Las Vacas Stream** Design and implement actions to improve water quality and promote an adequate habitat for flora and fauna species in the Arroyo Las Vacas.	Ciudad Acuna Department of Environment, SEMA Coahuila	$44,200 US Dollar	Border 2020	Lic. Alejandra Carrera, Secretaria de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implement actions to improve water quality and promote an adequate habitat for flora and fauna species in Las Vacas stream.	Progress has been made regarding the Arroyo Las Vacas diagnostic, water quality monitoring, and identification and detection of disputes through a ITSA-UT Austin Knowledge Exchange. A presentation of the project was presented at the Environmental Trade Fair in May 2015. In October, a training is scheduled regarding bi-national water quality, data comparison, and water sampling.

2.3.03	**Lower Rio Grande Binational Water Quality Initiative (LRGWQI)** Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan ,TCEQ, 512-239-2369, Kelly.holligan@tceq.texas.gov	Implement actions to improve water quality and promote an adequate habitat for flora and fauna in the Arroyo Las Vacas.	In March the LRGWQI's Binational Technical Work Group conducted the first of four binational synoptic water quality surveys scheduled for the project. They also developed a preliminary input file for a steady-state water quality model of the Rio Grande/Río Bravo (Falcon Dam to Gulf of Mexico).

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**Environmental Education Program Nuevo Laredo** Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America Beautiful.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipality of Nuevo Laredo		City of Laredo Environmental Services local partners, and Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establish an environmental organization affiliated with Keep America Beautiful by 2016.	Keep Laredo Beautiful will be meeting with officials of the Technological University of Nuevo Laredo in August to discuss the project and inquire about their interest in establishing an environmental organization through Keep America Beautiful. Keep Laredo Beautiful has committed to pay membership fees for one year for the organization to be affiliated with Keep America Beautiful.
3.1.02	**Characterization Municipal Solid Waste Stream & Diagnosis Regarding**	SDS Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000 US Dollar	Border 2020, BECC	Dr. Alfonso Martinez Muñoz, SDS, Nuevo León, alfonso.martinezm@nuev	Analyze the generation of solid and "special	Project completed. The study was finalized in June 2015. More details of the study will be

	Generation/Management of Waste Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo León.				oleon.gob.mx Alfonso.martinez@nuevoleon.gob.mx 01152-81-2033-2100	management" of six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	provided at a later date.
3.1.03	**Operation of an Electronic and Household Hazardous Waste Stockpile Center**	Municipality of Nuevo Laredo, Tamaulipas	$3.626 Million Pesos MX	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Develop a municipal infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	The installations are finished. Only authorization from SEMARNAT is needed for operation, which is underway. It is possible for operations to commence in the last trimester of the year.
3.1.04	**Environmental Code for the Disposal of Construction Waste**	Municipality of Nuevo Laredo, Tamaulipas	The project is funded through money paid by residents for the management and processing of waste.	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretariat of Public Works, Urban Development & the Environment, cdeandah@hotmail.com	Generate an alternative for the community for the disposal of construction waste and mitigate clandestine dumping.	This project has operated continually and generated an important impact to the community. 123 pesos per cubic meter are paid when the waste is no greater than 2 cubic meters. If it is three to ten cubic meters the service cost 88 pesos. If it exceeds 10 cubic meters, in order to leave the program, 100 pesos are charged per cubic meter.
3.1.05	**Clean-up Campaign Keep Pharr Beautiful** Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.	Public Works Department, City of Pharr	$20,000 US Dollar	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Reduce illegal dumping in residential and industrial sectors and encourage residents to take	The project has ended and the majority of their objectives were attained. Various public awareness events monthly clean-ups were organized. A workshop was organized for the

						responsibility for the beatification of their communities.	community about the reduction of clandestine dumping. The City plans to continue clean-up campaigns and environmental education activities.
3.1.06	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838 US Dollar	Border 2020	Melissa Gonzales, City of Alamo	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Various presentations were organized in 12 different locations in different schools that reached 700 students. Bilingual signs about not littering were posted.
3.1.07	**Clean-up of Urban Solid Waste Disposal Site in Guerrero Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	$3.169 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Legalize and encourage compliance to NOM-083-SEMARNAT-2003, referring to the closing of disposal sites.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.
3.1.08	**Construction and Equipping of the First Phase of Type A Landfill in Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	$19.359 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Have adequate modern infrastructure for the final disposal of urban solid waste.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.

3.1.09	**Construction and Equipping of Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz y Sabinas	$25 Millones Pesos MX	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Conduct land studies. Under analysis before request for bids.
3.1.10	**Construction and Equipping of Inter-municipal Landfill in the Municipalities of Juarez and Progreso, Coahuila**	SEMA, Municipality of Juárez y Progreso	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.11	**Construction and Equipping of Urban Solid Waste Residual Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.12	**RECOLECTRÓN Program** Recollection program for electronic waste within the municipalities.	SEMA, Municipalities Acuña, Allende, Nava y Sabinas	$2 Million Pesos MX	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	In 2015 collect 44.91 tons of waste. In 2016 collect 56.14 tons of waste.	To date 44.89 tons of waste has been collected.
3.1.13	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Utilizing three cuts volume and the accumulation of water which are breeding grounds for mosquitos (vectors for dengue fever) are reduced.	Municipality of Acuña, Coahuila	$12,000 US Dollar	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx	Develop a municipal infrastructure for stockpiling, managing, and disposing of scrap tires.	There is a regulatory framework that regulates management and a program underway for stockpiling, but an infrastructure is required for final disposal.
3.1.14	**Disposal of Electronic and Hazardous**	Municipality of Acuña, Coahuila	$12,500 US Dollar	Municipality of Acuña	Biol. Carlos Alejandro Flores Diego, Director de Ecología,	Develop a municipal	The regulatory framework was approved as well as an alteration

	Waste Create a stockpile center for the special management of waste, in which			Coahuila.	floresdiegocarlos@yahoo.com.mx	infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	to municipal regulations regarding the environment to approve an operating license for 6 months and certification of training workshops. Partnership with CECART#197 for certification.
3.1.15	**Scrap-Tire Management Program** Design and implement a state scrap-tire management program that includes valuation.	SEDUMA Tamaulipas	$ 400 Million Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Work with cities located on the northern border of the State to regulate a temporary stockpile system for used tires.	The State authorized the business, ECONEU of Reynosa, to operate the Recycle Plant and Scrap Tire Processor, of which they anticipate to break down 100,000 scrap tires annually.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	**Update Cross-Border Contingency Plan** Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.	Laredo Fire Department, Civil Protection of Nuevo Laredo, and CILA, CODEFRONT, and the City of Laredo		EPA, COCEF, PROFEPA, and Protección Civil	Steve Landin, Laredo Fire Department, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa, Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com 01152867 712-46-35	Hold new meetings of the staff of the two cities in order to revisit the language of the draft revision and possibly develop alternative language and include Colombia in the plan.	The project is on hold because city council has not approved changes to language of the draft revision, intending to clarify that Laredo could not send personnel to respond to incidents across the border, but could assist in other ways.

4.2.02	**Hazardous Materials First Responders Binational Training in McAllen-Mission-Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Fire department	$75,000 US Dollar	Border 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540	Hold a System and Incident Command Training with firemen from McAllen, Mission, Pharr, and Reynosa.	The Fire Department in McAllen will coordinate and hold the workshop at the end of August.

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Urban Forest Piedras Negras**	SEMA, Municipio de Piedras Negras, SEMARNAT	$ 15 Million Pesos MX	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Construct an urban forest in the city of Piedras Negras the size of 15 hectares.	Ninety-four percent of the project is complete.
6.0.02	**Strengthening School Networks and Global Climate Change Surveillance "Casa de Tierra"**	SEDUMA, Gobierno Municipal de Reynosa.	$ 66 Million Pesos MX	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Build, equip, and operate 3 "Casa de Tierra" to attend to the population in the northern, central, and southern areas of the State. 160 visitors annually.	CDT Victoria operating since December of 2013. CDT Reynosa operating since January 2015. CDT Madero in the final phase of construction.
6.0.03	**Extension of Environmental Management Systems Program** Extend Tamaulipas' state program in promoting environmental management	SEDUMA Tamaulipas	$ 300,000 Pesos MX	SEDUMA, Empresas IP, Participants	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SIMA enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a

	systems (SIMA) to more schools and government offices.						total of 26,000 students. Schools received equipment. SIMA trained 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs.
6.0.04	**Planning of Health & Environmental Information Model Along TX-MX Border** The development of a conceptual framework for a bi-national environmental and health information repository.	El Colegio de la Frontera del Norte	$39,875 US Dollar	Border 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identify required tools and capacities, compare existing systems, identify and recommend training or educational needs, and develop an indicator system to measure environmental health.	A theoretical framework in order to identify information on health and the environment was developed. Different key contacts were interviewed. Information was obtained about health and environmental indicators through the elaboration of Memorandums of Understanding between academic institutions involved in the project and the respective Secretariats of Health and the Environment from Coahuila State.
6.0.05	**Promotora-Led Environmental Health Education for Children** 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 heath promotoras, who subsequently will provide educational information in elementary schools, child care settings and to colonia residents.	La Amistad AHEC and Southwest Border AHEC	$69,083 US Dollar	Border 2020	Rosa Elvira Martinez, Southwest Area Border Health Education Center, rose.martinez@swbahec.org (830) 758-1111	Conduct training and provide educational information on pesticide awareness to elementary schools and homes in colonias.	As of July, promotoras had conducted visits to two elementary schools and one head start to educate children on hazards related to pesticide exposure and household chemicals. Promotoras also conducted training on pesticide awareness in more than 30 homes and post-assessments in seven homes, with 23 of them expected to be evaluated in the fall of 2015.

	EPA	BECC	EPA	BECC	JOINT DECISION *(EPA-BECC)*		NO.	Title	Name	Last Name
1	YES	YES	YES	YES	YES	**1-TS**	1	Dr.	Juan Pedro	Flores Margez
2	YES	YES	YES	YES	YES	**19-TS**	2		Jose Luis	Escanero Zamora
3	YES	YES	YES	YES	YES	**1-FS**	1	Ocean.	Heberto	Cavazos Literas

4	YES	YES	YES	YES	YES	**25-FS**	25		Oscar Alejandro	Flores García
5	YES	YES	YES	YES	YES	**31-FS**	31	Chief	Rogelio	Rubio
6	NO	YES	YES	YES	YES	**11-TS**	11		Juan Armando	Hurtado Corral

7	MAYBE	MAYBE	NO	YES	YES	**18-TS**	18		Gerardo	Bezanilla Enríquez
8	NO	YES	MAYBE	MAYBE	YES	**22-FS**	22	Ocean.	Heberto	Cavazos Literas
9	YES	MAYBE / YES	NO	YES	YES	**12-FS**	12	Ph.D	Kim D.	Jones
10	MAYBE	MAYBE / YES	YES	MAYBE / YES	YES	**4-FS**	4	Ing.	Víctor Manuel	Ibarra Balderas

11	MAYBE	MAYBE / YES	MAYBE	MAYBE / YES	YES	**9-FS**	9		David	Eaton
12	YES	NO	MAYBE	MAYBE / YES	YES / overlap activities	**2-FS**	2		Alicia	Gracia
13	YES	MAYBE / NO	YES	NO		**26-FS**	26	Ing.	Akelao	López
14	YES	MAYBE / NO	YES	MAYBE / NO	YES	**17-FS**	17		Grace	Gonzales

	YES	YES	YES	MAYBE / NO	YES	**24-FS**	24	Dr.	Juan Antonio	Herrera Izaguirre
	YES	MAYBE/YES			NO	**16-FS**	16	Ph.D	Wolfram Friedrich	Schaffler

SOLTA

E-mail	Project Applicant	Proposal
juflores@uacj.mx	Universidad Autónoma de Ciudad Juárez	**Programa Sustentable de Disposición de Lodos Residuales o Biosolidos en Suelos Agrícolas**
escanero@femap.org.mx	Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C.	**Vivienda sustentable y resiliente area poniente en Ciudad Juárez, Chihuahua**
ssma@tamaulipas.gob.mx	Subsecretaria de Medio Ambiente	**Programas Municipales de Residuos Sólidos Urbanos en Tamaulipas**

griselda.salas@sema.gob.mx	Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza	**Coordinación intersectorial para el adecuado manejo de residuos eléctricos-electrónicos**
rrubio@myharlingen.us	City of Harlingen Fire Department	**Binational Tabletop and Functional Exercises between the cities of Harlingen and Matamoros**
Clasesitcj@gmail.com	Instituto Tecnológico de Ciudad Juárez	**Infraestructura verde en espacio publico verde de Avenida Valle del Sol**

gbezanilla@hotmail.com , gerardo.bezanilla_enriquez@students.tamuk.edu , gbezanilla@uach.mx	Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología	**Mejoramiento de servicios ambientales en ranchos ganaderos mediante el pastoreo**
heberto.cavazos@tamaulipas.gob.mx	Secretaría de Desarrollo Urbano y Medio Ambiente	**Eficiencia Energética en sistemas de alumbrado público municipal de Tamaulipas**
Kim.Jones@tamuk.edu; Javier.Guerrero@tamuk.edu	Texas A&M University-Kingsville	**Decision Making Tool (DMT^{G}) for Determining LID Stormwater Detention**
ing_victor_m@prodigy.net.mx	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	**Sistema Integral de Reciclaje Sustentable en Residuos Electricos y Electrónicos**

Eaton@mail.utexas.edu	The University of Texas at Austin	**The Rio Grande/Río Bravo Water Quality Initiative**
agracia@brownsville-pub.com	Brownsville Public Utilities Board	**Fat, Oil and Grease (FOG) Public Outreach Campaign**
arkelao57@gmail.com	Junta de Aguas y Drenaje de la Ciudad de Matamoros	**Difusión y concientización al reglamento para el control de descargas**
Grace.gonzales@pharr--tx.gov	City of Pharr, Recycling Center	**Lets Clean it Up and Green it Up**

derechointernacional@hotmail.com	Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo	**Reforma Legislativa y Educación Ambiental**
wfschaffler@tamiu.edu	Texas A&M International University	**Building Binational Networks on Environmental Issues**

15-010

Description	GOAL	OBJECTIVE	PM	TYPE OF PROJECT	REGION	AMOUNT REQUESTED
The Universidad Autonoma de Ciudad Juarez proposes to advance on Goal 3, Objective 1 by developing an appropriate training program for farmers and agricultural technicians. The grant will help leverage partnership and funds with $19,941 from federal mexican programs like SAGARPA And CONAGUA and establish a sustainable program for recycling biosolids in agricultural land through a committee of the use of biosolids as well as an educational and training program that will help promote sustainability.	3	1	JH	1	3ST	$ 48,510.00
The NGO called *Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C.* , proposes to advance on the Fundamental Strategy of Building Capacity towards Climate Change Resiliency by the implementation of green construction practices through technical assitance and supervision. The grant will help leverage funds with $105,600 from the Federación Mexicana de Asociaciones Privadas to deliver a catalogue of mechanisms, tools and technologies to improve energy efficiency, construction and equipment for resilience through green infrastructure for low-income housing and will link the results of the project with the housing microfinance project from Federación Mexicana de Asociaciones Privadas to help promote sustainability.	FS-CC	N/A	AH	1	3ST	$ 50,000.00
The Subsecretaria del Medio Ambiente from the state ofTamaulipas, proposes to advance on Goal 3, by having a strategic planing document to describe the current situation regarding the solid waste in Rio Bravo and Valle Hermoso and carry out a diagnosis of illegal dump sites in the municipalities. The grant will help leverage partnership with the amount of S 11,227 from the state government for staff salaries.	3	1	JH	1	4ST	$ 20,866.00

The Secretaria del Medio Ambiente from the state of Coahuila, proposes to advance on Goal 3, by educating the public about the benefits of reuse of electronic products, the need to practice responsible consumption, as well as the importance of giving an appropriate final disposal to these waste material. The grant will help leverage partnership of S 62,568 from the state government and municipality resources. The project will install a permanent collection center in Ciudad Acuña, Coahuila, and will be sustained in the long term from through the installation of an intersectoral group.	3	1	JH	1	4ST	$ 16,777.20
The City of Harlingen Fire Department, proposes to advance on Goal 4, Objective 2 by the implementation of a hazmat training, a tabletop, and a functional exercise. Proposed Scenario consists of a tanker trailer roll-over accident carrying a petro product spilling into Mexico waterways. The City of Harlingen presnts a sister city agreement since 2014 to support mutual emergency response aid. Project will involve partnering with first responders from Matamoros and Cameron County. The project will help to promote sustainability by practicing the last update of the sister contingency plan to evaluate its reliability.	4	2	BD	2	4ST	$ 60,000.00
The Instituto Tecnologico de Ciudad Juarez, proposes to advance on the Fundamental Strategy of Building Capacity towards Climate Change Resiliency by the implementation of a demonstrative project of techniques of green infrastructure in a public park. The grant will help leverage funds with $5,506 in wages to deliver the implementation of passive systems for harvesting of the rainwater, strengthening the inventory of native vegetation; Incorporation and use of existing urban infrastructure and will Involve residents in the design, commissioning and maintenance to help promote sustainability.	FS-CC		AH		3ST	$ 43,204.00

The Universidad Autonoma de Chihuahua, proposes to advance on Goal 1, objective 1 by the implementation of a sustainable solution to mitigate dust control in the areas of Ascension and Palomas in Chihuahua. The proposed solution is to implement a planned pasturage process to grow grassland. Project will implement a baseline monitoring system and training on recovery practices of 68,000 has. The grant will help leverage funds with $25,600 and in partnership with several livestock associatiosn and the Comision Nacional de Areas Naturales Protegidas.	1	1	BD	1	3ST	$	41,388.54
The Secretaria de Desarrollo Urbano y Medio Ambiente, from the government of Tamaulipas, proposes to advance on Goal 1, Objective 2 by the implementation of a integral training program.The objective is to train 30 municipal officers from 10 municipalities in energy efficiency (municipal street lighting and energy efficiency on building and facilities), as well as the implementation of a train the trainer program. The grant will help leverage funds with $5,000 in salaries and facilities from the Government. The project will help to promote sustainability by replicating best practices along the state.	1		BD		4ST	$	9,385.00
The Texas A&M University – Kingsville, proposes to advance on Goal 2 Objective 2 by developing a software(modeling) to mitigate storm water floatables on localized flooding sites. The intention is to reduce the detention pond footprint by allowing the storage volume to be incorporated to design detention calculations. Project will also include 4 workshops and a website development. The grant will help leverage funds of $7,000 on staff time. The project will help to promote sustainability by maintaining the operation capability of the model.	2	2	BD	2	4ST	$	38,885.00
The Grupo Ecologico Green Tec-Osos from the Insituto tecnologico de Piedras Negras, proposes to develop sustainable practices in the handling of e-waste materials to enhance the value of their respective markets and to support the recovery and recycling of electronic and electrical waste. The grant will help leverage funds with $39,840 in wages to give presentatios and to generate awareness on solid waste reduction and sustainable recycling of electrical and electronic waste, to help promote sustainability.	3	2	JH	2	4ST	$	36,054.00

The University of Texas at Austin (UT), proposes to advance on Goal 2, Objective 3 by providing information to local binational stakeholders, about sources of water pollution to the Rio Grande and by gathering information from key stakeholders about potential local solutions to the river's water quality problems. The project proposes to organize 5 workshops and develop MOU among stakeholders. The grant will help leverage funds with $40,109 of staff time, and committed coordination with the IBWC.	2	3 & 3a	BD	1	4ST	$ 58,575.00
The Brownsville Public Utilities Board, a government entity, proposes to advance on Goal 2, Objective 2 by implementing a public FOG campaign, targeting businesses with violations and reaching out to them. It will also provide education through community outreach and public awareness through 4 quarterly workshops. The grant will help leverage funds of $49,561 from the City.	2	2	BD	2	4ST	$ 25,000.00
The Junta de Aguas y Drenaje from the City of Matamoros, proposes to advance on Goal 2 Objective 2 by providing training to businessess and industries about the control of wastewater discharges in Matamoros. There will be 10 workshops and wastewater testing. The goal is to train 50% of the users involved in the implementation of this Regulation Program to control discharges and perform wastewater FOG testing to 10% of users. The grant will help leverage funds with $50,000 on staff and facilities. The project promotes sustainability by permanently implementing the Regulation Program.	2	2	BD	2	4ST	$ 25,000.00
The City of Pharr Recycling Center, a governmental entity, proposes to advance on Goal 3, Objective 1 by developing final disposal events to divert items from the landfill, as well as workshops aimed to generate awareness on recycling opportunities. The grant will help leverage funds from the City of Pharr, of $123,397.45 to continue with a cleanup program to reduce illegal dumping in the streams of hazardous domestic waste , used oil and used electronics to help promote sustainability	3	1 & 2	AH	1 & 2	4ST	$ 36,390.00

The Universidad Autónoma de Tamaulipas, proposes to advance on Goals 2, 3 and 5 by improving the implementation of environmental legislation, strengthen the environmental cooperation and exchange of information between Nuevo Laredo, Tamaulipas and Laredo, Texas, and train environmental inspectors and staff of the municipal environmental unit. The grant will help leverage funds with $5,500 from Universidad Autónoma of Tamaulipas.	5&2&3		AH		4ST	$ 11,000.00
Texas A&M International University, proposes to advance on Goals 5, Objective 4 by developing a "Best Practices" Seminar series for Government and private stakeholders in the topic of "Compliance and Environmental Stewardship". The grant will help leverage funds with $49,9100 from TAMIU to conduct 5 Seminars designed to exchange information and improve understanding of each Country's respective compliance and enforcement programs and tools including field studies. to help promote sustainability A permanent updating of the reports of all stakeholders that participate in the project and send their information will be available to the general public at the website of the Binational Center of the Texas A&M International University.	5	4	AH	1	4ST	$ 49,910.00

LEVERAGE AMOUNT	LEVERAGE LETTERS	TOTAL AMOUNT	*Discussion comments*
$ 19,941.00	8	$ 68,451.00	
$ 105,600.00	2	$ 155,600.00	
$ 11,227.00	3	$ 32,093.00	

$ 62,568.22	6	$ 79,345.42	
$ -	2	$ 60,000.00	*Can it be aligned with another Grant?*
$ 5,506.00	3	$ 48,710.00	*Include more detail on specific environmental benefits, not only landscaping or benefitting the park*

$ 25,611.46	5	$ 67,000.00	*Partner with other agricultural agencies to strengthen the BMP. Consider bitantional efforts, including a US ranch*
$ 4,925.00	1	$ 14,310.00	*Requires more details on proposal.*
$ 7,000.00	1	$ 45,885.00	*Ask EPA if there are ongoing efforts in this project*
$ 39,840.00	4	$ 75,894.00	

$ 78,422.00	1	$ 136,997.00	
$ 49,561.00	2	$ 74,561.00	*Coordinate between the City of Matamoros, and Brownsville to integrate overlapping activities as part of both proposals.. Reduction on budgets required. Coordination should be set immediately with possible grantees.*
$ 50,000.00	2	$ 100,000.00	
$ 123,397.45	3	$ 159,787.45	

Possible granted amount	Available amount

$ 5,500.00	4	$ 16,500.00	This proposal was originally selected, but was not considered during the discussion on our last call	**$ 521,034.74**	**$601,437**
$ 53,318.00	1	$ 103,228.00	A sugestion from EPA on this proposal for possible selection was risen; however, in consultation with BECC´slegal department, it is not possible to pay salaries to governement officials as requested by this proposal, so it cannot be considered for selection		

Unallocated funds

$80,402

Cell: U14
Comment: jmarruffo:
Original proposed budget: 30,778
Suggested budget: 25,000

Cell: U15
Comment: jmarruffo:
Original proposed budget: 50,000
Suggested budget: 25,000

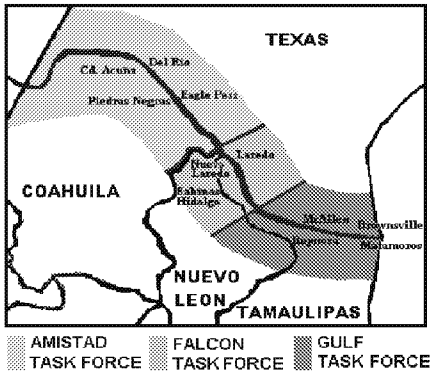
BORDER 2020

FINAL REPORT ON THE 2013-2014 Action Plan

for the TX-COAH-TAMP-NL Regional Workgroup

December 2014

(original plan published in October 2012)



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
   a. Analyze emissions and emission sources in specific airsheds
   b. Engage in both road-paving and reforestation (using native species)
   c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
   d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
2. Improve water quality by taking the following actions:
   a. Evaluate the portion of the Rio Grande watershed that is in the region
   b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
   c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
   d. Develop more applications for the re-use of water
   e. Reduce non-native species in the water bodies
   f. Continue and expand environmental education efforts such as “Adopt the River” and “Day of the River”

ED_002319B_00013600-00001

3. Address problems of improper waste disposal:
    a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
    b. Expand environmental education related to waste issues
    c. Close and remediate open dumps wherever required by regulation
4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Reduction of energy consumption in buildings and street lighting
2. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
3. Construction of sanitary landfills
4. Attention to waste disposal in gas drilling operations
5. Continuing attention to emergency response
6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
7. Improvement of vehicle inspection programs in Coahuila
8. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Re-use of treated water
2. Monitoring of drilling operations in the Eagle Ford Shale
3. Finalizing the cross-border contingency plan

Gulf Task Force

1. Improvement of water-related infrastructure, and increased attention to water conservation and re-use
2. Increased recycling
3. Continuing capacity-building at the local, state, and federal levels of government
4. Technical exchanges, including best practices and lessons learned

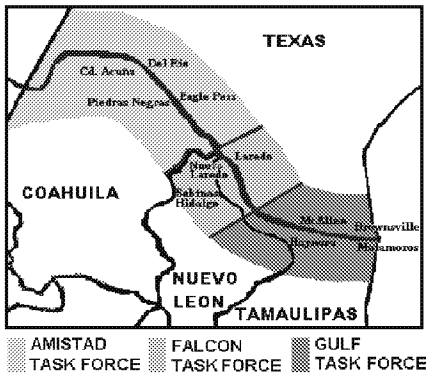
ED_002319B_00013600-00002

Border 2020

2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



Note: This Border 2020 Action Plan does not include infrastructure projects related directly to Border 2020 goals and objectives in air, water, and waste that have been financed in part or in full by the binational North American Development Bank. For information on those projects, see http://www.nadbank.org/.

GOAL # 1: Reduce Air Pollution

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures							
1.1.01	Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (State of Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ (State of Texas)	$700,000	Originally SEMA (State of Coahuila); now the municipios	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, Monclova, Saltillo, and Ramos Arizpe.	Implementation is in progress. The original commitment was made by a former

							administration in Coahuila. The current administration reports that no state funding is available and all jurisdiction is at the municipal level. Acuña obtained the necessary equipment in late 2014 and will put it to use as soon as possible. Officials in Nava report they are trying to identify funding that will allow the purchase of equipment and initiation of implementation in 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects							
1.5.01	Implement a competitive grants program aimed at local governments, dedicated to improvements in energy efficiency.	University of Texas at Austin, LBJ School	$175,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Complete all projects by August 2013.	The LBJ School made grants to six projects, all of which were completed by July 2013. The School issued the RFP in October 2012. An independent committee reviewed twenty-one applications and recommended six projects: two cities, an irrigation district, and three school districts. The University awarded grants to those entities, which subsequently completed their projects by the summer of 2013.
1.5.02	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila:	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been

	Quantification of the mitigation policies selected in Phase 1.						established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired, and a local coordinator and local experts recruited.
1.5.03	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$100,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	Five technical groups began work in July 2012. In 2013-14, the state strategy has been redesigned. A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired.
1.5.04	Research the potential for harnessing wind power for electricity in Tamaulipas.	SEMARNAT and SEDUMA (State of Tamaulipas)		SEMARNAT will seek funds	Delfino Ramirez, SEMARNAT, Delfino.ramirez@semarnat.tamaulipas.gob.mx	Conduct research and explore business opportunities.	This activity is a subset of project # 1.5.11. See the latter below.
1.5.05	Research the potential for harnessing wind power for electricity generation in Nuevo León.	SDS (Secretaría de Desarrollo Sustentable de Nuevo León)	$10,000	Mexican federal funds/CONACYT	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	Based on information from monitors installed by an independent party, SDS has generated a wind map with data with a resolution of 5 km. In the next stage, they will generate a map with a resolution of 1 km. They expect to have that ready in 2015.

ED_002319B_00013600-00005

1.5.06	Construct and operate a facility that extracts methane gas from the Nuevo Laredo landfill and burns it to generate electricity for the municipality.	Municipio de Nuevo Laredo and Setasa (Servicios de Tecnología Ambiental S.A.)	$3.5 million	Private sector; a company will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	Sergio Martínez López sergiomartinezlopez@hotmail.com	Have the facility in full operation by the end of 2014.	A feasibility study was completed 2008 with funding from USAID. Issuance of a tender for construction has been pending for several years; the municipio needs to obtain the property title. The project has been put on hold as of fall 2014.
1.5.07	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty, commercial drayage trucks in cross-border trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum.	SEMARNAT and the Municipio of Nuevo Laredo	$50,000	EPA border grant through the BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program), eduardo.olivares@semarnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program), valencia_osvaldo@hotmail.com	Complete the project by the end of 2014.	The project was completed in 2013. The study collected information from 456 companies and on 2,756 drayage trucks. Half of the sampled trucks were from model year 2000 or earlier, and 84 percent were model year 2006 or earlier. A final report summarized the information and offered information on retrofit technologies that could reduce emissions, and a workshop was held in Nuevo Laredo in September 2013.
1.5.08	Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	1,400,000	SEMA Coahuila	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region	Implementation was begun, but the schedule for completion has been extended by two or more years.

ED_002319B_00013600-00006

						and Saltillo Region, Coahuila.	In 2013 SEMA began working with local officials to include these projects in the plans of the applicable "Metropolitan Zones". A network will be deployed in Saltillo in 2015 and in Piedras Negras in 2016.
1.5.09	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Alejandra Carrera, SEMA/Coahuila, alejandra.carrera@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot retrofit technologies.	With assistance from the BECC, workshops were held in December 2013 in Piedras Negras and Acuña, disseminating information on how public buildings could be made more energy-efficient. No information is available regarding whether 10 pilot projects are being pursued.
1.5.10	Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Have a vehicle verification program in the border area of the state by end of 2014.	A pilot program focused on the state-owned fleet was initiated in early 2013. Additional implementation has been put on hold, with the hope that a program for private vehicles can be initiated in 2015.
1.5.11	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential in Tamaulipas.	SEDUMA (State of Tamaulipas)	Unknown	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Prepare action plan for nine wind power projects and state's strategic energy program.	In October 2014 SEDUMA hosted the Third International Congress on Renewable Energy in Cd. Victoria. The governor established an energy

							council with representatives from business, academia, and government. Promotion of renewable energy and efficiency was among its charges. The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of 2015. The state distributed guides on energy conservation for offices and schools, small businesses, industry, homes, automobiles, and public lighting systems. In addition, 16 companies set up a trust fund (fideicomiso) to expand renewable energy infrastructure in Tamaulipas.
1.5.12	Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA, EPA, and BECC	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	By 2014, the system will operate at 100% with programmatic consistency standards.	Eight municipalities have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Nuevo Laredo, Victoria, Mante, Tampico, Madero, and Altamira).

ED_002319B_00013600-00008

							Currently only three of these have their network in operation (Nuevo Laredo, Victoria, and Tampico).
1.5.13	Implement an environmental management system as a strategy for energy efficiency in Tamaulipas.	SEDUMA (State of Tamaulipas) and municipios	$ 100,000	SEDUMA, EPA, and COCEF	Ing. Humberto Rene Salinas, seduma@tamaulipas.gob.mx	By 2014, train 100% of the border municipalities.	State authorities trained 16 municipalities from the border region of Tamaulipas and the San Fernando Valley region. The workshop was held in Reynosa, with an attendance of approximately 100 people.
1.5.14	Support the attendance of school district officials from the border region at a statewide conference on energy efficiency.	The TCEQ, the LBJ School of Public Affairs at UT Austin, and border-region school districts	$ 27,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Support the attendance of operations staff and board members from nine school districts at the Clean Air through Energy Efficiency conference in November 2014.	In September 2014 the LBJ School of Public Affairs issued a solicitation of interest in September 2014 to 100 school districts in the border region. Seven districts applied and were granted support. One of the seven districts failed to show up at the conference.

Goal # 2: Improve Access to Clean and Safe Water

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
2.0.01	Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant.	Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)		SADM, BECC, and National	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com y Carlos Avila,	Have the plant in operation by the end of 2014.	The project was cancelled.

				Water Commission	carlos.avila@sadm.gob.mx		
2.0.02	Organize a "Water Awareness Summit" to educate the public in the Lower Rio Grande Valley about where their water comes from, how the planning process works, what the outlook is, and the importance of conservation.	Texas State Representative Eddie Lucio III, TCEQ, cities and their water utilities, the Rio Grande Regional Water Authority, and the Lower Rio Grande Valley Development Council	$10,000-15,000	Local funding efforts/sponsors	Claudia Lozano (TCEQ) claudia.lozano@tceq.texas.gov	Hold the conference in early 2013.	The first Water Awareness Summit was held in February 2013. More than 200 people attended and expressed interest in making the event annual. A second Summit was held in March 2014, with approximately 300 attendees. A third Summit was held in Dec 2014 with approximately 190 attendees.
2.0.03	Train the staff of small drinking water utilities in Texas' border region in best practices related to compliance with the U.S. Safe Water Drinking Act.	Texas A&M Engineering Extension Service	Less than $15,000	EPA	Bessie Orr Williams (Texas A&MM TEEX), Bessie.Williams@teex.tamu.edu	Hold workshops in three different locations in the Lower Rio Grande Valley in 2014, with at least one workshop in Spanish, and invite Mexican utilities.	The project was completed. Three identical workshops were held on successive days in September 2014 in Rio Grande, McAllen, and South Padre Island, Texas. A total of 68 utility staff persons attended, 20 of them from Mexico. The workshop in McAllen was provided in Spanish. Topics included basic water quality, groundwater production, surface water production, disinfection, and distribution.

Objective 1: Promote the increase in the number of homes connected to safe drinking water and adequate wastewater treatment.							
2.1.01	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila.	CEAS and SEMA (State of Coahuila)	$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Complete the studies by early 2014.	The feasibility studies were completed in 2013. CEAS was then making efforts to implement water management programs in those municipalities. No information has been available since then.
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	Provide teacher training workshop(s) and/or on-site facilitators to implement educational water quality monitoring events in conjunction with 2012/13 World Water Monitoring Challenge.	Texas Partnership for Water Education (TPWE): EPA, WEAT, TAWWA Scout Troops, ISDs, informal environmental education (EE) providers	Funding needed varies with # of participants(testing kits $25/ 30 individuals / site).	Various funding possibilities will be explored	Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Teachers &/or students, as well as interested community members will identify monitoring site, and sampling results will be submitted to TPWE's WWMC Program Coordinator.	The project was cancelled.
2.2.02 (Sub-obj. 2c)	Promote energy management practices among Texas water and wastewater utilities by conducting quarterly meetings on energy management planning, training on a pumping-system assessment tool, and on-site energy efficiency assessments (key cities include Laredo, Roma, Mission, Agua Specialty Utility District, Edinburg, McAllen, Pharr, Weslaco, Mercedes, Harlingen, and Brownsville).	Partner with a university to conduct meetings, trainings and on-site energy assessment involving engineering students.	Funding sought: $75,000/yr or $150,000	Various funding possibilities will be explored	David Reazin, EPA Region 6, (214) 665-7501, reazin.david@epa.gov	Hold quarterly meetings to develop energy management plan and benchmark energy use and costs, one PSAT training, and two on-site assessments.	A scaled-back project was completed. EPA partnered with the BECC instead of a university to organize a workshop in late September 2014 in Brownsville, Texas. Besides the Brownsville PUB as host, other participants included the City of Laredo and Laredo Water Utilities, the City of Pharr, the City of San Benito, the East Rio Honda WSC, McAllen Water Utilities, San Antonio Water

							Supply, the City of Weslaco, and Santa Cruz Irrigation District #15. Also in attendance were the Office of the Texas Secretary of State, the Community Resource Group, CPS Energy, and the Texas Water Development Board. Presenters and participants discussed beset energy management practices and exchanged experiences.
2.2.03	Organize a workshop in Laredo for water utilities and the restaurant industry to discuss best practices related to abatement of discharges of fats, oils, and grease (will also involve Nuevo Laredo).	City of Laredo water utility, Webb County, and Nuevo Laredo	$23,000	EPA border grant through the BECC	Karla Robles (City of Laredo Utilities) krobles@ci.laredo.tx.us	Hold the workshop by the spring of 2013 and then follow-up meetings with utilities to discuss implementation of FOG programs in the summer and fall of 2013.	The project was completed in January 2014. Laredo Utilities organized a binational workshop in March 2013, presenting "best management practices" with regard to management of fats, oils and grease. More than 350 people, including representatives from the maquiladora sector in Nuevo Laredo and restaurants in both cities, attended the event. Laredo Utilities then coordinated two follow-up meetings in August and December 2013, at which participants shared their experience in applying the practices, and also produced a 7-minute

							video about FOG management, for use in education of commercial establishments. Out of 22 establishments that participated in the original workshop, 14 decreased their amount of FOG generation more than 50%.
2.2.04	Conduct training for small businesses in the Reynosa area on best practices related to discharges of fats, oils, and grease (will include before and after measures).	Municipio of Reynosa	$16,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798, ecologiareynosa@hotmail.com	Organize a workshop or training event(s).	The project was canceled.
2.2.05	Implement a public campaign to increase awareness of problems of non-point-source pollution in the Lower Rio Grande Valley of Texas, through signs posted on roadways and at public facilities, messages on a school district television station, presentations at numerous public events and meetings, and newsletters of various organizations.	Fifteen cities in the Lower Rio Grande Valley (LRGV) that are members of the Texas Pollution Discharge Elimination System Stormwater Task Force, Texas A&M Kingsville, school districts, and NGOs	$40,000	EPA border grant through the BECC	Javier Guerrero (Lower Rio Grande Valley TPDES Stormwater Task Force, Texas A&M University-Kingsville), 956- 457-3023 jguer0351@aol.com	Complete the project by the end of 2013.	Workshops were coordinated with the Cities of Harlingen, San Benito, La Feria, Palm Valley, Primera, Weslaco, Donna, Alamo, San Juan, La Joya, Edinburg, Palmview, and Mission. A total of 104 signs were installed by those cities at various locations, and those locations were GPS'd.
2.2.07 (Sub-obj. 2b)	Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank (NADB)	Claudia López Aguilar (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) claudialopez@comapanuevolaredo.gob.mx	Complete the project by summer 2013.	BECC certified the project in September 2012, and all work is expected to be completed by January 2015. The objective was to address five sewer collection lines, all with upgrades. Of the five, one of them was been completed by mid-2014 and connected to the

							wastewater treatment system. The remaining four collectors were under repair and still discharging about 1.6 MGD to the stormwater system. Another discharge point from La Joya Creek was identified by COMAPA and will be repaired after an agreement is signed with a private property owner where it is located.
2.2.08 (sub-obj. 2c)	Hold workshops on energy efficiency for water utilities and perform energy audits of the utilities in five municipios in Tamaulipas—Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	BECC and the water utilities in Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	$250,000	EPA and BECC	Abdias Moreno (BECC), amoreno@cocef,org	Complete the project by 2014.	The project was completed. Workshops were held in 2013, and then final energy audits were presented at a meeting in Matamoros in early July 2014. The audits recommended retrofits requiring a total investment of $3.7 million, with average payback times of one-two years.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	Develop and produce region-specific supplemental materials necessary to produce a *Waters to the Sea*- Rio Grande module. (*Place-based education with comprehensive watershed focus).*	Center for Global Environmental Education (CGEE)-Hamline University, Harte Research Institute @ Texas A&M-Corpus Christi, EPA, WEAT, and AWWA	Approx $100,000 in 2013 $ 50,000 in 2014	Various funding possibilities will be explored	CGEE- Tracy Fredin Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Recruit and establish an advisory board, produce videos and other materials, identify one or two ISDs to pilot program, and conduct training for at least 25 teachers in 2014.	The project was cancelled.

ED_002319B_00013600-00014

2.3.03	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas, which are tributaries to the Rio Grande.	SEMA (State of Coahuila), Municipio de Piedras Negras and Municipio de Acuña	$400,000	Coahuila will fund first part and will be seeking funding for the rest	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Begin implementing the campaigns and conclude land conservation agreements by the end of 2014.	SEMA obtained EPA funding through the BECC in spring 2014 to restore and conserve the Arroyo Las Vacas. SEMA has developed partnerships with TCEQ, Ciudad Acuña, local academic institutions, and UT Austin. SEMA and BECC finalized the workplan and are negotiating the quality assurance project plan. In October 2014 in Cd. Acuña SEMA held a ribbon cutting for the Arroyo Las Vacas project and a complementary signing ceremony regarding land conservation. Several entities are collaborating on the development of a similar project for the San Rodrigo river. The projects will promote public awareness and take actions to improve the ecosystems of the arroyo and the river.
2.3.04	Implement a program to remove invasive plants in the Rio Grande.	SEMA (State of Coahuila), CONANP, Profauna	$85,000	SEMA (Coahuila), CONANP, Profauna – and will seek other funding sources	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sema.gob.mx	By the end of 2014, increase the activities of the invasive species plant removal program in the Rio Grande on the border of Coahuila.	No progress yet had been made by mid-2013. No information has been available since then.

2.3.05	Organize a regional workshop to disseminate "best practices" related to water conservation policy, programs (such as EPA's Water Sense), and public education, and implement enhanced programs in at least one pair of sister cities.	City of Laredo, EPA, TCEQ, TX Water Development Board, Piedras Negras Technological Institute	$6,000	City of Laredo, EPA, TCEQ, and local sponsors	Miguel A. Pescador mpescador@ci.laredo.tx.us Debora Browning EPA, Region 6 browning.debora@epa.gov	Hold a regional workshop in Laredo by spring 2013, and implement a new campaign in two sister cities by 2014. Enlist 10 new WaterSense Partners.	A day-long workshop was organized and hosted by Laredo in March 2013. More than 100 persons attended from both sides of the border, including Texas and Tamaulipas state agencies, and discussed conservation strategies. No new WaterSense Partners had been added by mid-2014 as a result of the workshop.
2.3.06 (Sub-Obj. 3a)	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly.holligan@tceq.texas.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Terms of reference were developed that serve as the framework used by participating entities in the collaboration. In February and July 2013, TCEQ hosted training sessions on water quality modeling software (QUAL-TX and LAQUAL) for Mexican agency and EPA staff. In July 2014 TCEQ began taking water samples in the target stretch of the Rio Grande for analysis. Mexican partners have not yet set a date for their sampling.

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila	Unknown	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarnat.tamaulipas.gob.mx Lic. Alejandro Manriquez Ramirez (SEMARNAT/Coahuila), educacion@coahuila.semarnat.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013. Hold an information exchange meeting w/Texas 2014	SEMARNAT implemented the program very successfully in Tamaulipas and on a very limited basis in Coahuila. No information is available from Nuevo León. By mid-2013 in Tamaulipas, 135 schools had been registered in the program—33 in Nuevo Laredo, 50 in Reynosa, and nine in Matamoros. SEMARNAT Coahuila has certified one school in Cd. Acuña for the program.
3.1.02	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers, and workshops at schools.	Cameron County and the Valley Proud Environmental Council	$10,000	Lower Rio Grande Valley Development Council, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the project by the end of 2013.	Cameron County and the Valley Proud Environmental Council engaged in a media campaign against illegal dumping, using billboards and newspapers throughout the Lower Rio Grande Valley. The two entities received numerous phone calls during the campaign,

ED_002319B_00013600-00017

							expressing concern about the trash that they had seen dumped throughout the valley.
3.1.03	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions.	The Cities of Pharr, Mission, McAllen, and Mercedes, and the Town of Bayview	$160,000	Lower Rio Grande Valley Development Council, TCEQ, and individual local government	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org (956) 682-3481	Finish the five separate but related projects by the end of 2013.	All cities except one completed their projects (Bayview cancelled its activity). The cities expanded and enhanced their recycling capabilities at their recycling centers by purchasing mobile recycling trailers, forklifts, and other equipment. Also, Pharr has introduced Curby the recycling robot in outreach activities.
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio of Nuevo Laredo		The City of Laredo Environmental Services local partners, and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), lnava1@ci.laredo.tx.us	Establish an organization in 2013 in Nuevo Laredo and affiliate with Keep America by the end of 2014.	The project's objectives are expected to be fully completed in early 2015. Reciclado en Acción/Fundación Verde was established in 2013, and initiated environmental awareness events in Nuevo Laredo. The City of Laredo Environmental Services will be covering the membership fees (about $6,000) for the organization to be affiliated with Keep America Beautiful.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public	Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program)	Install the bins at all elementary schools in 2013 and start relevant	The project was completed. Bins were installed in elementary schools and

	bins in parks, to include all elementary schools in Nuevo Laredo.				valencia_osvaldo@hotmail.com	environmental education programs for students.	environmental education conferences were resumed at the schools in February 2013.
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dr. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	This project was re-numbered and is now #6.0.07
3.1.09	Redesign and extend coverage of the *E-Conexion* newsletter as a strategy to share best practices.	SEDUMA (State of Tamaulipas)	$ 30,000	SEDUMA	Dra. Silvia Casas (SEDUMA), silviacasas757@gmail.com	Extend the dissemination of *E-Conexion* to 100% of the Tamaulipas municipalities.	SEDUMA expanded the electronic distribution to include 43 municipalities, all their state offices, environmentally certified schools (SIMA-E), and private industry. To save paper and ink, SEDUMA no longer prints and distributes hard copies. Minor changes were made to the design and the use of background colors is minimized.
3.1.10	Organize a visit to Austin, TX by private and public sector Mexican waste management specialists to see a model sanitary landfill and municipal recycling operation	Red Ambiental (headquartered in Monterrey, Nuevo León) Secretariat for Sustainable Development (State of Nuevo León), and the TCEQ (State of Texas)	Unknown	Red Ambiental	Eddie Moderow (TCEQ), eddie.moderow@tceq.texas.gov	Organize the visit for October 2014.	The project was completed. The visiting group included fourteen public- and private-sector officials from six Mexican states. They spent two days in Austin in October, talking with Austin City officials and TCEQ staff, and visiting the Texas Disposal Systems landfill in Creedmore and the

							Balcones Resources' recycling facility in Austin.
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat (State of Nuevo León), and TCEQ (State of Texas)	$35,000	EPA border grant through the BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com	Survey border municipalities on both sides of the border, prepare a "best practices" manual, and perhaps hold a regional workshop	The project was completed in 2013. SDS surveyed more than 20 local governments on both sides of the border and then developed a manual for local governments on best practices for scrap-tire management. With this manual as the focus, SDS collaborated with the TCEQ to organize a binational workshop held in March 2013. Representatives of 10 local governments plus state and federal governments, as well as private industry, attended the workshop.
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	SDS (Nuevo León), SEMARNAT, and Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo, Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	This particular project has been cancelled and replaced by a related but different project in the same municipio. See project # 3.2.08 below.
3.2.03	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, Texas.	Texas A&M University – Kingsville (TAMUK)	$15,000	EPA border grant through the BECC	Dr. Kim Jones kfkdj00@tamuk.edu	Through a demonstration project, assist communities in building capacity for	With the grant funds available, TAMUK managed a demonstration project that baled

						scrap-tire management.	approximately 62,500 scrap tires (625 bales) and used 125 of the bales as part of the sub-base of a section of a landfill road bed in Brownsville. TAMUK is looking for an additional $15-20K to use the remaining 500 bales and complete the extension of the road.
3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Significant progress was made. By mid-2013 compost was being generated by COMAPA and applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center. The utility subsequently began distributing compost to schools for landscaping and gardening and also uses it at COMAPA facilities. COMAPA uses 5 to 10% of all the bio solids generated at the wastewater treatment plant for the compost. In 2015 the utility expects to sign an agreement with the municipio to purchase equipment that will enable generation of more compost, and

							then begin selling it to commercial establishments and businesses.
3.2.05	Implement a collection and management program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	The program will be in full operation by spring 2013.	The program was in full operation in 2013, after the first steps had been taken in August 2012. In 2013, the city collected about 27.7 tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap-tire management program that includes valuation.	SEDUMA (Tamaulipas)	$ 400,000	SEDUMA/SEMARNAT/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Develop public policy and a management plan for scrap tires	The project is on hold.
3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA (Tamaulipas)	$ 300,000	SEDUMA/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Complete action plan	The project is on hold.
3.2.08	Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León.	SDS (Nuevo León) and Municipio of Sabinas Hidalgo, Nuevo León	$25,156	BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	Complete the study by 2015.	[This project is a replacement for project # 3.2.02, and was not initiated until mid-2014.] By the end of 2014, the study was 35% completed.

Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	Complete the remediation of old oxidation lagoons in Piedras Negras.	Municipio de Piedras Negras and SEMA (State of Coahuila)	$300,000	SEMA	Maria Teresa Molina, Municipio de Piedras Negras, teduada@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. Piedras Negras has not responded to inquiries

						extension to and a green area at the site.	about the project during 2013 and 2014.
3.3.02	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass.	City of Eagle Pass	$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.us	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Remediation of a portion of the site was carried out prior to 2010. The city will seek assistance through the TCEQ's Brownfields Site Assessments Program to determine whether the site meets the federal definition of a brownfields site and is eligible for funding under the EPA's brownfields program.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA (State of Coahuila), Municipio de Piedras Negras	$400,000	SEMA	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	By mid-2013, SEMA determined they needed to perform a feasibility study on using coal pits as disposal sites for scrap tires. No information has been available since then.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	Develop an emergency response plan for the maquiladoras in Brecha E-99 in Reynosa,Tamaulipas.	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park	$10,000	EPA border grant through the BECC	Dr. Emilio Sonderegger Arriola emilio.sonderegger@landisgyr.com		The project was canceled.

		Mutual Aid Committee)					
4.2.02	Hold a second "knowledge exchange" on risk mapping for first responders on both sides of the Lower Rio Grande Valley in Texas-Tamaulipas, for the purpose of identifying and gaining access to existing sources of data on hazmat storage and determining additional needs.	Fire departments from Texas and Mexican municipalities in the Gulf Task Force area, EPA, TCEQ, and Civil Protección for both Tamaulipas and Mexico	Unknown	EPA and NORTHCOM	Paige Delgado (EPA), Delgado.paige@epa.gov EPA Region 6	Hold the exchange during the first half of 2013	A first exchange was held in July 2012. The project is on hold because of the uncertainty of funding from NORTHCOM.
4.2.03	Hold a binational chemical-spill exercise at the World Trade Bridge between Nuevo Laredo, Tamaulipas and Laredo, Texas.	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	$5,000	EPA border grant through the BECC	Lic. Juan Ernesto Rivera Gómez (Civil Protección de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com or ernestorivera5775@hotmail.com	Hold the exercise after the U.S. and Mexican governments have approved permits that allow hazardous waste to be transported on this bridge.	The project is in progress. The U.S. Department of State issued a "presidential permit" in May 2014 to allow the crossing of hazardous materials. The Mexican government is awaiting the completion of a water quality study on the Rio Grande that CONAGUA required before the permit is issued. If and when a Mexican permit is issued and both nations sign diplomatic notes, local officials will organize a binational exercise.
4.2.04	Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	$5,000 - will be looking for funders	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho (Protección Civil de Nuevo León). jorge.camacho@nuevoleon.gob.mx	Add the Solidarity Bridge, which is upstream from Laredo and Nuevo Laredo, to the Joint Contingency Plan for Laredo and Nuevo Laredo by the end of 2013.	See the following project (4.2.05).

	hazardous materials in the area are currently directed to this bridge.						
4.2.05	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department), evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com	Hold new meetings of the staff of the two cities in 2013 in order to re-visit the language of the draft revision and possibly develop alternative language.	The project is on hold. Laredo officials met in May 2013 to make changes to one sentence in a draft of the new cross-border contingency plan that had been originally prepared in 2009. The changes were intended to clarify that Laredo could not send personnel across the border, because of security and liability concerns, but could assist in other ways. The revised agreement was been approved subsequently by Nuevo Laredo, but has been awaiting action by the Laredo City Council since that time.
4.2.06	Update and improve the cross-border contingency plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b) Del Rio, Texas and Ciudad Acuna, Coahuila, which will include risk analysis and development of risk maps.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de Ciudad Acuña, BECC, and Consultoria y Servicios en Seguridad Industrial y Medio Ambiente S.A. de C.V	$130,000	EPA border grant through the BECC	Briselda Duarte (Border Environment Cooperation Commission), bduarte@cocef.org and M.C. Mónica de Jesús Pérez Morales (Consultoría y Servicios en Seguridad Industrial y Medio Ambiente, S.A. de C.V.)	Complete new plans by the end of 2013.	Begun in 2012, the project was completed by the end of 2013. Under contract from the BECC, two workshops were organized in the first half of 2012 for staff from the two pairs of sister cities to discuss protocols and risks. After delays and the hiring of a new contractor, additional

							workshops were held in July 2013. In November of that year, the two sister-city pairs each signed a Memorandum of Cooperation for new cross-border contingency plans. Each community committed to providing resources and mutual aid in case of chemical accidents.

Multi-Goal Projects

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	Organize educational campaigns featuring training sessions for health professionals, health students, and promotoras followed by community outreach in the Laredo and Harlingen areas in Texas, addressing how to reduce pre-natal and childhood exposure to pesticides, lead, solvents, second-hand tobacco, and diesel exhaust.	The University of Texas Health Science Center in San Antonio	$50,000	EPA border grant through the BECC	Claudia Miller, M.D., MillerCS@uthscsa.edu or steer@uthscsa.edu	Complete the project by the end of 2013.	The project was fully implemented in 2013. Two training sessions were held for 40 promotoras (lay healthcare workers)—20 from in the N. Laredo/ Laredo area and 20 from the Cameron County and adjoining municipios in Tamaulipas. The classes covered 17 types of potentially hazardous exposures during pregnancy and childhood, and how to avoid these exposures. Subsequent to the training, the

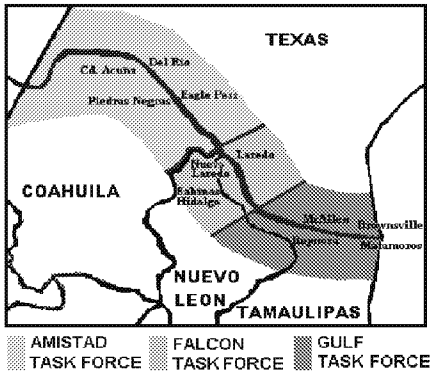
							promotoras provided outreach to 400 pregnant women or mothers with young children in a three-month period. Each of those families made an oral commitment to discuss lessons learned with two other families.
6.0.02	Conduct educational workshops/plays on the safe handling and disposal of pesticides for farm workers in the Lower Rio Grande Valley of Texas and in the Laredo area.	Migrants in Action – Weslaco, Texas	$20,000	EPA border grant through the BECC	Noemi Ochoa (Association of Farmworker Opportunity Programs), nochoa@yahoo.com	Produce the EPA-written play "El Moscas y los Pesticidas" using students in two cities in the first half of 2013	The project was completed in 2013-- Student groups in Laredo and Edinburg performed the play before more than 2,000 people.
6.0.03	Develop of a binational repository of databases on environmental stresses and public health effects.	Texas A&M Health Science Center, School of Rural Public Health, PAHO, BECC, HIDA-REY COBINA, Hidalgo County Health Dept.	$50,000	EPA border grant through the BECC	Genny Carrillo (Texas A&M Health Science Center, School of Rural Public Health), gcarrillo@srph.tamhsc.edu	Review the literature, build a cross-border partnership of professionals at the local, state, and national levels, identify health hazards in the environment and relevant indicators, and build a binational repository of databases by the end of 2013.	Project staff accomplished as much as possible during the grant period, but encountered unanticipated difficulties with selected objectives. The project reviewed literature, and talked with health professionals on the U.S. side, and established a repository of U.S. databases. The project made contact with professionals in Mexico but had difficulty finding relevant databases on that side of the border that were not outdated. The project also discovered that the

							Mexican professionals use different parameters than are used in the United States.
6.0.04	Address children's environmental health issues in Laredo, Texas and Webb County by surveying a sample of homes and identifying health risks, tracking reported exposures through selected hospitals and clinics, developing and implementing a public outreach campaign regarding the identified risks, and identifying and publicizing two relevant online courses available for physicians.	Laredo Health Department	$50,000	EPA border grant through the BECC	Waldo Lopez (City of Laredo Health Department) wlopez@ci.laredo.tx.us	Complete the project by the end of 2013.	Laredo completed the project by the end of 2013. Project staff surveyed the use of pesticides and household hazardous materials in more than 135 homes. More than 50 physicians and health providers were trained on diagnosing illnesses related to pesticide exposure through the use of a web-based diagnostic tool, allowing them to assist survey respondents with symptoms related to pesticide exposure. Staff distributed publications on lead and pesticides to over 120 homes.
6.0.05	Organize annual Environmental Summits for the public in the Lower Rio Grande Valley, in cooperation with State Representative Eddie Lucio III's office.	TCEQ, and cities in the Lower Rio Grande Valley	$15,000	Local sponsors , EPA	Imelda Pena, TCEQ Imelda.pena@tceq.texas.gov	Hold Environmental Summits in the fall of 2013 and in the fall of 2014.	The fourth annual Valley Environmental Summit was held in October 2013. An estimated 300 people attended. Their priority interests were illegal dumping, marine debris, and community cleanup programs. The fifth summit was held in October 2014 with

							approximately 350 attendees. The topics of interest were sustainability, local enforcement programs and household hazardous waste programs.
6.0.06	Organize annual Environmental Summits for the public in Webb County, in cooperation with State Senator Judith Zaffirini's office.	TCEQ and the City of Laredo	$15,000	Local sponsors , EPA	Carmen Ramirez, TCEQ , carmen.ramirez@tceq.texas.gov	Hold Environmental Summits in the fall of 2013 and 2014.	Environmental Summits were held in Laredo in October 2013 and November 2014. These were the fourth and fifth in an annual series. The 2013 Summit had more than 400 attendees. Speakers discussed recycling, energy efficiency, and water conservation. The 2014 Summit had a theme of "Focus on Nature" and targetted high school students, who comprised a majority of the 325 attendees. Topics included weather preparedness and energy efficiency. There were also hands-on activities on building a natural habitat and sampling water quality parameters.
6.0.07 (formerly 3.1.08)	Extend Tamaulipas' state program in promoting environmental management systems (SIMA) to more schools and government offices.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dra. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SEDUMA made significant progress in expanding the use of its guidelines for environmental

							management programs. SIMA's educational division enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a total of 26,000 students. The schools also received equipment such as low-flow water toilets, recycling containers, and energy-efficient light bulbs. SIMA's institutional division trained more than 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs and reduced energy costs 13.03% from January to August 2014. Tamaulipas will expand both programs to more schools and state offices in 2015.

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup
September 2015



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical extension and the number of municipalities. The region includes parts of three states and a total of at least 29 municipalities on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2015, the three task forces held meetings to discuss initial priorities for the 2015-2016 Action Plan. Several conference calls with leaders were held in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side
    c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal:

4. Assist communities to build capacity for waste streams: by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets

ED_002319B_00013614-00001

5. Expand environmental education related to waste issues

6. Enhance Joint Preparedness for Environmental Response
    a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills in the.
    b. Coordinate emergency preparedness response table top exercise or field exercises.

7. Develop a certified environmental health curriculum to train border community health workers and promotoras on lead, mercury, pesticides, and other heavy metals

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitoring of drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalizing the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets(such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop a diagnostic study on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs.
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias
5. Healthy Homes training for promotoras along the GTF' US-MX border

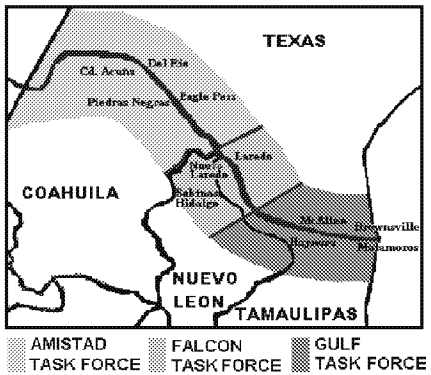
ED_002319B_00013614-00002

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures.							
1.1.01	**Characterization of Drayage Activities & Emissions Laredo-Nuevo Laredo Airshed** Develop a detailed characterization of the drayage activity in the Laredo-Nuevo Laredo region and its air quality implications.	Texas A&M Transportation Institute	$89,750 US Dollar	Border 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Gather activity information on drayage vehicles to estimate their emissions impacts in the Laredo and Nuevo Laredo airshed.	TTI obtained permissions by the EPA, BECC and the Texas A&M IRB to collect GPS data from drayage vehicles operating in the Laredo-Nuevo Laredo region. TTI recruited 20 drayage truck operators and collected GPS data. TTI staff are analyzing the data and determining the emission impact of the trucks.

ED_002319B_00013614-00003

1.1.02	**Emissions from Long Haul MX Diesel Trucks in Laredo-San Antonio Corridor** Survey diesel truck activity and evaluate typical Mexican diesel truck emissions along Laredo-San Antonio Corridor.	Texas A&M Transportation Institute	$100,000 US Dollar	EPA, TCEQ	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Collecting and analyzing data. TTI will present findings and report in August.	The project is complete. In August a final report was submitted to TCEQ with findings and is currently under review.
Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to quality data.							
1.3.01	**Update the Ecological Program Code for the Region Cuenca de Burgos, Tamaulipas**	SEDUMA Tamaulipas	$2 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a Monitoring and Evaluating System for the most relevant environmental Indicators, considering performance, defining measurements that allow one to track the strategy's effectiveness and the code's defined policies.	The project is in the process of being updated by a hired external consultant that will perform modifications to the current code.
Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States, and build the necessary capacity to guarantee sustained implementation.							
1.4.01	**Municipal Climate Action Plan of San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	$ 2.199 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a public policy planning instrument for the development of strategies and actions to mitigate greenhouse gas	This project is undergoing administrative procedures to execute the awarded budget. The municipality of San Fernando will oversee the project and has State support for

						emissions. Reduce municipal vulnerability to climate change by enhancing adaptability.	the validation of reference terms and the respective technical annex.
1.4.02	**Tamaulipas State Climate Change Program**	SEDUMA Tamaulipas	$200,000 US Dollar	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Update the greenhouse gas emissions inventory and develop the program's climate change adaptation agenda.	An external consultant will develop the project. The update to the inventory has been completed. Currently both the Adaptation Agenda is being developed and the integration of both components. The deadline is November 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects.							
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila: Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000 US Dollar	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	The project is currently in the Microeconomic and Public Policy Phase for Coahuila State. Meetings have been held with the Technical Working Groups, the Advisory Group, and the Climate Change Committee.
1.5.02	**Air Quality Network in Coahuila** Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipalities of Piedras Negras, Acuña, Nava, Sabinas, Saltillo	$12 Million Pesos MX	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila.	The project has been authorized and is in the revision phase prior to bidding.

1.5.03	**Tamaulipas Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$300,000 US Dollar	BECC, BID	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired. They are working on the agenda, updating the emissions inventory, and the integration of both components.
1.5.04	**Atmospheric Monitoring System** Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA Tamaulipas	Annually: $ 250,000 Pesos MX ($150,000 Municipal & $100,000 State)	SEDUMA, City Council of Matamoros	Biol. Jorge Garcia, jgarciah@tamaulipas.gob.mx 834 1078291	By 2014, the system will operate at 100% with programmatic consistency standards.	Currently four of the eight municipalities have their air monitoring network in operation (01 Nuevo Laredo, 02 in Victoria, 01 in Madero and 01 Tampico). The operation site for the four monitors located in Matamoros for the last trimester of 2015 is being managed.
1.5.05	**Green Infrastructure Workshop**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Train municipalities on Green infrastructure.	Two workshops were held. One on April 21, 2015 in which 5 municipalities from the Southeast region attended and a second workshop on May 27, 2015 that was attended by 10 municipalities from the Central and Desert regions. The state workshop will occur in the final trimester of 2015.

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	**Upgrade Sewer Line Infrastructure Nuevo Laredo** Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5 Million US Dollar	NADB	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Complete the project by January 2015.	The BECC certified the project in September of 2012. Of the five sewer lines one was completed during the first half of 2014. The remaining four lines are under repair and discharge approximately 1.6 MGD to the fluvial water system. Another discharge point was identified by COMAPA in the Arroyo La Joya and will be repaired.
2.2.02	**Management of Fats, Oils, and Grease Nuevo Laredo** Reduce the concentration of fats, oils, and grease in the effluent water coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo León.	$32,533 US Dollar	Border 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Hold workshops and follow-up with commercial establishments on implementation of FOG programs	COMAPA organized workshops with the support of students from the Technical University to educate commercial establishments and residents on best practices. The last workshop was held in August of 2015 that included a tour of the International Waste Water Treatment Plant. All the establishments that participated in the workshops have grease traps and are applying control and operating techniques. COMAPA is drafting the final project report.

2.2.03	**Ideal Biological Filtration Material South Texas Storm Management** Identify the best locally available material for use in bio-swale in the Lower Rio Grande Valley & South TX.	University of Texas Pan American	$26,022 US Dollar	Border 2020	Jungseok Ho, Ph.D. University of Texas Rio Grande Valley, jungseok.ho@utrgv.edu (956) 665-3104	The proto-type bioswale will be tested in a newly constructed parking lot on the campus of UT Pan American.	The recycled ground recycled glass of medium porosity demonstrated good hydrologic performance in the biological filtration process.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	**Removal of Invasive Plants** Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Slim Foundation	$1.5 Million Pesos MX Annually	SEMA (Coahuila), CONANP, Profauna WWF, Slim Foundation	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Plant Control: 2014: Tamarix 34 ha & Carrizo 40 ha; 2015 Tamarix 34 ha and Carrizo 40 ha; 2016: Tamarix 34 ha and Carrizo 40 ha.	Since 2014 PROFAUNA and CONANP with the support of WWF and the Slim Foundation have annually protected 34 hectares from the Tamix plant and 40 hectares from Carrizo. To date they have continue to protect the same quantity of land and it is anticipated that they will maintain this amount in 2016.
2.3.02	**Conservation of Las Vacas Stream** Design and implement actions to improve water quality and promote an adequate habitat for flora and fauna species in the Arroyo Las Vacas.	Ciudad Acuna Department of Environment, SEMA Coahuila	$44,200 US Dollar	Border 2020	Lic. Alejandra Carrera, Secretaria de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implement actions to improve water quality and promote an adequate habitat for flora and fauna species in Las Vacas stream.	Progress has been made regarding the Arroyo Las Vacas diagnostic, water quality monitoring, and identification and detection of disputes through a ITSA-UT Austin Knowledge Exchange. A presentation of the project was presented at the Environmental Trade Fair in May 2015. In November, a training is scheduled regarding bi-national water quality, data comparison, and water sampling.

2.3.03	**Lower Rio Grande Binational Water Quality Initiative (LRGWQI)** Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan ,TCEQ, 512-239-2369, Kelly.holligan@tceq.texas.gov	Implement actions to improve water quality and promote an adequate habitat for flora and fauna in the Arroyo Las Vacas.	In March the LRGWQI's Binational Technical Work Group conducted the first of four binational synoptic water quality surveys scheduled for the project. They also developed a preliminary input file for a steady-state water quality model of the Rio Grande/Río Bravo (Falcon Dam to Gulf of Mexico).

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**Environmental Education Program Nuevo Laredo** Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America Beautiful.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipality of Nuevo Laredo		City of Laredo Environmental Services local partners, and Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establish an environmental organization affiliated with Keep America Beautiful by 2016.	Keep Laredo Beautiful will be meeting with officials of the Technological University of Nuevo Laredo in August to discuss the project and inquire about their interest in establishing an environmental organization through Keep America Beautiful. Keep Laredo Beautiful has committed to pay membership fees for one year for the organization to be affiliated with Keep America Beautiful.
3.1.02		SDS Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000 US Dollar	Border 2020, BECC	Norma Rangel Sevilla, SDS, Nuevo León,	Analyze the generation of solid and "special	Project completed. The study was finalized in June 2015. More

	Characterization Municipal Solid Waste Stream & Diagnosis Regarding Generation/Management of Waste Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo León.				normaarangel@gmail.com 0115281 20 33-19-38	management" of six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	details of the study will be provided at a later date.
3.1.03	**Operation of an Electronic and Household Hazardous Waste Stockpile Center**	Municipality of Nuevo Laredo, Tamaulipas	$3.626 Million Pesos MX	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Develop a municipal infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	The installations are finished. Only authorization from SEMARNAT is needed for operation, which is underway. It is possible for operations to commence in the last trimester of the year.
3.1.04	**Environmental Code for the Disposal of Construction Waste**	Municipality of Nuevo Laredo, Tamaulipas	The project is funded through money paid by residents for the management and processing of waste.	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretariat of Public Works, Urban Development & the Environment, cdeandah@hotmail.com	Generate an alternative for the community for the disposal of construction waste and mitigate clandestine dumping.	This project has operated continually and generated an important impact to the community. 123 pesos per cubic meter are paid when the waste is no greater than 2 cubic meters. If it is three to ten cubic meters the service cost 88 pesos. If it exceeds 10 cubic meters, in order to leave the program, 100 pesos are charged per cubic meter.
3.1.05	**Clean-up Campaign Keep Pharr Beautiful** Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.	Public Works Department, City of Pharr	$20,000 US Dollar	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Reduce illegal dumping in residential and industrial sectors and encourage residents to take	The project has ended and the majority of their objectives were attained. Various public awareness events monthly clean-ups were organized. A workshop was organized for the

						responsibility for the beatification of their communities.	community about the reduction of clandestine dumping. The City plans to continue clean-up campaigns and environmental education activities.
3.1.06	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838 US Dollar	Border 2020	Melissa Gonzales, City of Alamo	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Various presentations were organized in 12 different locations in different schools that reached 700 students. Bilingual signs about not littering were posted.
3.1.07	**Clean-up of Urban Solid Waste Disposal Site in Guerrero Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	$3.169 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Legalize and encourage compliance to NOM-083-SEMARNAT-2003, referring to the closing of disposal sites.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.
3.1.08	**Construction and Equipping of the First Phase of Type A Landfill in Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	$19.359 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Have adequate modern infrastructure for the final disposal of urban solid waste.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.

3.1.09	**Construction and Equipping of Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz y Sabinas	$25 Millones Pesos MX	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Conduct land studies. Under analysis before request for bids.
3.1.10	**Construction and Equipping of Inter-municipal Landfill in the Municipalities of Juarez and Progreso, Coahuila**	SEMA, Municipality of Juárez y Progreso	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.11	**Construction and Equipping of Urban Solid Waste Residual Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.12	**RECOLECTRÓN Program** Recollection program for electronic waste within the municipalities.	SEMA, Municipalities Acuña, Allende, Nava y Sabinas	$2 Million Pesos MX	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	In 2015 collect 44.91 tons of waste. In 2016 collect 56.14 tons of waste.	To date 44.89 tons of waste has been collected.
3.1.13	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Utilizing three cuts volume and the accumulation of water which are breeding grounds for mosquitos (vectors for dengue fever) are reduced.	Municipality of Acuña, Coahuila	$12,000 US Dollar	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx	Develop a municipal infrastructure for stockpiling, managing, and disposing of scrap tires.	There is a regulatory framework that regulates management and a program underway for stockpiling, but an infrastructure is required for final disposal.
3.1.14		Municipality of Acuña, Coahuila	$12,500 US Dollar	Municipality of	Biol. Carlos Alejandro Flores Diego, Director de Ecología,	Develop a municipal	The regulatory framework was approved as well as an alteration

	Disposal of Electronic and Hazardous Waste Create a stockpile center for the special management of waste, in which			Acuña Coahuila.	floresdiegocarlos@yahoo.com.mx	infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	to municipal regulations regarding the environment to approve an operating license for 6 months and certification of training workshops. Partnership with CECART#197 for certification.
3.1.15	**Scrap-Tire Management Program** Design and implement a state scrap-tire management program that includes valuation.	SEDUMA Tamaulipas	$ 400 Million Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Work with cities located on the northern border of the State to regulate a temporary stockpile system for used tires.	The State authorized the business, ECONEU of Reynosa, to operate the Recycle Plant and Scrap Tire Processor, of which they anticipate to break down 100,000 scrap tires annually.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	**Update Cross-Border Contingency Plan** Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.	Laredo Fire Department, Civil Protection of Nuevo Laredo, and CILA, CODEFRONT, and the City of Laredo		EPA, COCEF, PROFEPA, and Protección Civil	Steve Landin, Laredo Fire Department, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa, Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com 01152867 712-46-35	Hold new meetings of the staff of the two cities in order to revisit the language of the draft revision and possibly develop alternative language and include Colombia in the plan.	The project is on hold because city council has not approved changes to language of the draft revision, intending to clarify that Laredo could not send personnel to respond to incidents across the border, but could assist in other ways.

4.2.02	**Hazardous Materials First Responders Binational Training in McAllen-Mission-Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Fire department	$75,000 US Dollar	Border 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540	Hold a System and Incident Command Training with firemen from McAllen, Mission, Pharr, and Reynosa.	The Fire Department in McAllen will coordinate and hold the workshop at the end of August.

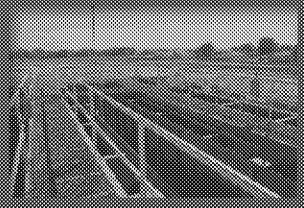
Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Urban Forest Piedras Negras**	SEMA, Municipio de Piedras Negras, SEMARNAT	$ 15 Million Pesos MX	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Construct an urban forest in the city of Piedras Negras the size of 15 hectares.	Ninety-four percent of the project is complete.
6.0.02	**Strengthening School Networks and Global Climate Change Surveillance "Casa de Tierra"**	SEDUMA, Gobierno Municipal de Reynosa.	$ 66 Million Pesos MX	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Build, equip, and operate 3 "Casa de Tierra" to attend to the population in the northern, central, and southern areas of the State. 160 visitors annually.	CDT Victoria operating since December of 2013. CDT Reynosa operating since January 2015. CDT Madero in the final phase of construction.
6.0.03	**Extension of Environmental Management Systems Program** Extend Tamaulipas' state program in promoting environmental management	SEDUMA Tamaulipas	$ 300,000 Pesos MX	SEDUMA, Empresas IP, Participants	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SIMA enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a

	systems (SIMA) to more schools and government offices.						total of 26,000 students. Schools received equipment. SIMA trained 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs.
6.0.04	**Planning of Health & Environmental Information Model Along TX-MX Border** The development of a conceptual framework for a bi-national environmental and health information repository.	El Colegio de la Frontera del Norte	$39,875 US Dollar	Border 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identify required tools and capacities, compare existing systems, identify and recommend training or educational needs, and develop an indicator system to measure environmental health.	A theoretical framework in order to identify information on health and the environment was developed. Different key contacts were interviewed. Information was obtained about health and environmental indicators through the elaboration of Memorandums of Understanding between academic institutions involved in the project and the respective Secretariats of Health and the Environment from Coahuila State.
6.0.05	**Promotora-Led Environmental Health Education for Children** 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 heath promotoras, who subsequently will provide educational information in elementary schools, child care settings and to colonia residents.	La Amistad AHEC and Southwest Border AHEC	$69,083 US Dollar	Border 2020	Rosa Elvira Martinez, Southwest Area Border Health Education Center, rose.martinez@swbahec.org (830) 758-1111	Conduct training and provide educational information on pesticide awareness to elementary schools and homes in colonias.	As of July, promotoras had conducted visits to two elementary schools and one head start to educate children on hazards related to pesticide exposure and household chemicals. Promotoras also conducted training on pesticide awareness in more than 30 homes and post-assessments in seven homes, with 23 of them expected to be evaluated in the fall of 2015.

ED_002319B_00013614-00015

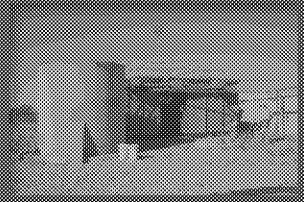
EPA Region 6



QUARTERLY REPORT

January – March 2018

US-MEXICO COOPERATIVE AGREEMENT
Implementation of Border 2020 Program
EPA-Region 6
X4-00F92501



Submitted by:
Javier Torres, Technical Assistance Manager

Banco de Desarrollo de América del Norte
North American Development Bank

QUARTERLY STATUS REPORT

US-MEXICO COOPERATIVE AGREEMENT
Implementation of Border 2020 Program
EPA-Region 6

GRANT: X4-00F92501

Grant Period: Sep. 17, 2004 – Aug. 31, 2019

REPORTING PERIOD:

January – March 2018

TO:
Monica Wilson
U.S. EPA, Region 6 (6PD)
Environmental Protection Specialist

FROM:
Javier Torres
North American Development Bank
Technical Assistance Manager

April 30, 2018, Cd. Juárez, Chihuahua, México

US Mexico Border 2020 Environmental Program - Quarterly Grant Status Report

Grant Title:	**Grant Agreement No.**
US – Mexico Border Cooperative Agreement Implementation of EPA Region-6 Border 2020 Program	X4-00F92501

Contact:

Primary Contact Name: **Javier Torres**
Organization: North American Development Bank
Telephone & Fax: 01-656-688-4600 Email: jtorres@nadb.org

Reporting Period (please check appropriate period):

- ☐ July 1 – September 30, 2017, Reporting period: report due on October 30, 2017
- ☐ October 1 – December 31, 2017, Reporting period: report due on January 30, 2018
- ☒ January 1 – March 31, 2018, Reporting period: report due on April 30, 2018
- ☐ April 1 – June 30, 2018, Reporting period: report due on July 30, 2018
- ☐ July 1 – September 30, 2018, Reporting period: report due on October 30, 2018
- ☐ October 1 – December 31, 2018, Reporting period: report due on January 30, 2019
- ☐ January 1 – March 31, 2019, Reporting period: report due on April 30, 2019
- ☐ April 1 – June 30, 2019, Reporting period: report due on July 30, 2019
- ☐ July 1 – August 30, 2019, Reporting period: report due on September 30, 2019

Check here if this is the final reporting period under your grant ☐

Please explain any current of expected growth of your project. If there is growth potential, have you consulted with other partners for further or future leveraging of funds, for continuing the project after funding from the Environmental Protection Agency ends?

None to report.

Indicate the goal(s) and objective(s) of the Border 2020 Framework Document that this grant is addressing (http://www.epa.gov/border2020)

GOAL 1. - *Reduce Air Pollution*

Objective 1. - By 2020, in accordance with the NAFTA, promote the reduction of the number of vehicles operating in the border region that do not comply with the respective vehicle emissions' standards and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible reduction measures.

ED_002319B_00013627-00003

- **Project type 1:** Support the development of vehicle emissions programs in collaboration with governmental entities in order to improve compliance, enhance detection and correction of non-compliance vehicles. In addition, capacity building activities to reduce air pollution, in the border cities or at the Ports of Entry (POE), which may include the enforcement of environmental compliance at the time of used vehicle importation.

Objective 2.- By 2020, reduce pollutant emissions in order to approach attainment of respective national ambient air quality standards (i.e. National Ambient Air Quality Standards (NAAQS) or Norms as they are referred in Mexico) in the El Paso, Texas–Dona Ana County, New Mexico and at State of Chihuahua's border cities' air sheds.

- **Project type 1:** Establish joint collaboration strategies with governmental and/or non-governmental regulatory and planning agencies to identify and implement air pollutant reduction strategies to achieve better air quality in the Paso del Norte region (PdN). Projects should promote, expand, and be consistent with the strategies identified in PROAIREs (Mexico's air shed management plan) or U.S. Clean Air Act (USCAA) State Implementation Plans (SIPs.)

Objective 3. – By 2018, maintain effective Ambient Air Quality Monitoring Network (AAQMN) and provide real-time access to air quality data produced at New Mexico/Texas /Mexico air sheds.

- **Project Type 1:** Initiatives for this objective should aim to ensure the long term sustainability and data quality for the El Paso, Texas – Ciudad Juarez, Chihuahua air quality monitoring network.

GOAL 2: ***Water – Improve Access to Clean and Safe Water***

- **Project type 1:** Efforts under this goal should be targeted to capacity building proposals that incorporate replication strategies, on proper maintenance and/or decommissioning of septic tanks, water conservation and pollution prevention in order to better understand, plan and maintain cleanup sources of drinking water on future groundwater supplies in New Mexico-Texas-Chihuahua border, specifically in Dona Ana County, New Mexico (particularly those communities along the corridor between El Paso, Texas and Las Cruces, New Mexico) and Luna County, New Mexico and El Paso County, Texas.

Objective 2. - Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.

- **Project type 1:** Conduct energy and/or water audits on small water drinking systems that serve communities with less than a population of 5,000 users, to identify recommendations on how to improve efficiency and provide cost-savings measures for that system.
- **Project type 2:** Outreach and education to improve water quality within the Gulf Task Force Region.

Objective 3. - Work bi-nationally to identify and reduce surface water contamination in Trans - boundary water bodies and watersheds.

ED_002319B_00013627-00004

Objective 3a. - Develop a binational watershed protection plan in the Lower Rio Grande below Falcon International Dam. Initial activities could include partnership building, watershed characterization, definition of goals/identification of solutions, determination of waste load, load allocations for each country, and development of an implementation plan.

- **Project type 1:** Continue to support activities that meet objective 3a– The proposals should address any water quality sampling and collection, data analysis, modeling and surveys still required by the bi-national workgroup on this project. In addition, the work should also support any additional training or workshops needed, among others, by the Amistad and Falcon Task Force, as well by the Texas-Coahuila-Nuevo Leon –Tamaulipas, Regional Work Group.

GOAL 3: ***Promote Materials Management & Waste Management, & Clean Sites***

Objective 1. - By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.

- **Project type 1**: Proposals should be aimed to build capacity and establish strategies to improve infrastructure to minimize waste, maximize collections systems, support secondary materials markets, and reduce overall disposal in landfills and open dumps.

Objective 2. - Identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.

- **Project type 1:** Identify priority waste streams in the municipalities from Four States region and develop sustainable waste management programs for those municipalities to include strengthening the market value of the waste.
- **Project type 2:** Develop sustainable management practices to address used electronics, household hazardous waste, and tires in the Region which will include an educational component to promote recycling and solid waste practices.

GOAL 4: ***Enhance Joint Preparedness for Environmental Response***

Objective 2. - By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building

- **Project type 1:** Conduct bi-national training to both U.S. and Mexican local emergency responders, on incidents involving Chemical, Biological, Radiological, Nuclear, or Explosive (CBRNE), and/or all hazards response skills enabling them to respond safely and effectively to these types of incidences.
- **Project type 2:** Conduct bi-national training to U.S. and Mexican local emergency responders, specifically on HAZMAT incidences only.
- **Project type 3:** Conduct bi-national: 1) tabletop drill with functional drill/exercise or 2) Full Scale Drill/Exercises to test local sister city plans. In order to meet the definition of bi-national, the drills/exercises should go beyond a simple notification to the local sister-city pair and demonstrate actual coordination of resources (expertise, equipment, personnel, etc.) between the sister-cities.
- **Project type 4:** Develop a hazardous materials risk analysis.

ED_002319B_00013627-00005

GOAL 5. – Enhance *Compliance Assurance and Environmental Stewardship*

Objective 4. - By 2020, implement at least five (5) binational workshops targeted to environmental enforcement professionals, including ports-of-entry customs professionals (i.e. Department of Homeland Security-Customs and Border Protection), to promote the exchange of information and improve understanding of each Country's respective compliance and enforcement programs and tools, including field studies.

- **Project type 1:** Proposals should consider events for information exchange to improve understanding each Country's respective compliance and enforcement programs and tools including field inspections and case development practices.

Fundamental Strategies

Promoting Environmental Health

- **Project type 1:** Projects presented under this fundamental strategy should increase engagement and participation by the community and stakeholders to better manage the environment and public health issues along the border.

Building Capacity towards Climate Change Resiliency

- **Project type 1**: The Border 2020 climate change efforts should focus on reducing greenhouse gas (GHG) emissions and on actions to help border communities become more resilient to the effects of climate change.

Summary of approved Work Plan activities performed during the reporting quarter.

Projects in progress during reporting period:

Project ID	Goal	Objective	Project Name	Status
20298	3	1	Sewage Sludge and Biosolids Agricultural Soils Project in the Valle de Juarez, Chihuahua	Project Status: Attended meetings of District Rural Development Councils convened by SAGARPA to continue the dissemination and activation of the Commission for the Use of Biosolids; collected and analyzed all the information that has been obtained in the activities and supported the Project Director in writing the final report of the project. The final report will be delivered by June 30, 2018
20297	2	2	Decision Making Tool (DMT[G]) for Determining LID Stormwater Detention, Brownsville, Texas	Project Status: Activities for this quarter include the development of a website for the project; the modeling runs for the Tool were completed in 2017, and the DMT will be finalized and rolled out through workshops in Spring 2018. For this reason, a project no-cost extension is recommended and will be requested through July 31, 2018.

ED_002319B_00013627-00006

Summary of the Work Plan performance outputs/outcomes achieved during the reporting quarter.

None to report.

Are you on track with your timeline? **Yes** ☒ **No** ☐

A description of problems encountered during the reporting quarter that may affect the project schedule and a discussion of meeting the performance outputs/outcomes.

None

Resolutions to Problems Previously Reported.

None to report.

Activities Anticipated/Planned for Next Three Months and Budgeted Costs.

Continue with the development of active projects.

Discuss what key personnel did on the project.

Briselda Duarte and Jorge Hernandez coordinated project development activities with EPA and sponsors. Marielena Constandse prepared this report and provided Contract Administration. Javier Torres provided Grant Administration coordination with EPA. Joaquin Marruffo supervised the execution of the project activities.

Discuss any changes in key personnel.

No personnel changes have taken place.

Please name any significant partner organizations that you (as the lead organization) have for this project, who are taking responsibility for substantial portions of implementation.

None to report.

BUDGET SUMMARY - Include information on the expenditure of grant agreement funds during the quarter and cumulatively by task in the provided budget tables. The tasks should correspond to the tasks outlined in your approved grant agreement work plan and the tables may be expanded accordingly. In addition, include in your narrative an estimate of funds needed to complete the work required in the grant agreement compared to the funds remaining in the grant agreement. ***Note: This section does not substitute for the annual financial status report (SF-269) required by the grant agreement***.

TABLE 1				
Summary of Quarterly Expenses by Category (Report Period January 1 to March 31, 2018)				
Work Plan Tasks	**Approved Work Plan Budget**	**Previously Expended**	**Expenses this Quarter**	**Total Cumulative Expenses**
Task A- Projects	$ 278,255.00	$192,428	$6,239	$198,667
Task B- Emergency Response	$ 26,290.00	$25,055	$0	$25,055
Indirect Cost	$30,455.00	$21,748	$624	$22,372
TOTAL Cumulative Expenses	**$335,000.00**	**$239,231**	**$6,863**	**$246,094**

TABLE 2			
Budget Categories (programmatic costs only)	**Task A Projects**	**Task B Emergency Response**	**TOTAL Quarterly Expenses**
Personnel	$0	$0	$0
Fringe Benefits	$0	$0	$0
Travel	$0	$0	$0
Equipment	$0	$0	$0
Other (specify)	$6,239.12	$0	$6,239.12
TOTAL Direct Charges	$6,239.12	$0	$6,239.12
Indirect Costs	$623.91	$0	$623.91
TOTAL Cumulative Expenses	$6,863.03	$0	$6,863.03

[1]*EPA defines equipment as items that cost $5,000 or more with a useful life of more than one year. Items costing less than $5,000 are considered supplies.*
[2]*Applicants must comply with the procurement procedures contained in 40 CFR 31.36, or for non-profits, with 40 CFR30.40.*

What is the geographic scope of your project implementation? *(Include whether it is within the Tri-State and/or Four-State Region of Border 2020, whether implementation takes place in both the U.S. and Mexico, and any more specific implementation.)*

The geographic scope of this award covers the Tri-State Region, which includes the states of New Mexico, Chihuahua and the West Texas region; and the Four-State Region which includes the rest of Texas, Coahuila, Tamaulipas and Nuevo Leon.

I certify that this report is true and correct, project is on schedule except as noted, and funds are being utilized as planned and agreed to in the award document.

Signature of Project Official:

Printed Name: Javier Torres

Title: Technical Assistance Manager **Date:** April 30, 2018

Within 30 days following the end of each quarter, please submit this report to your EPA Project Officer.

ATTACHMENT "A"

THREE STATE (TX-CHIH-NM) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Goal/ Fund. Stategy	Objective	Project Name	Project Implementer / Contact Information	BECC Contract Officer & Project Manager	Amount Approved / Amount Disbursed	STATUS
1	20298	3	1	**Sewage Sludge and Biosolids Agricultural Soils project in the Valle de Juarez, Chihuahua**	Universidad Autónoma de Cd. Juárez	Jorge Hernandez (PM)	$ 48,510.00 $ 11,743.08	**Project Status:** Attended meetings of District Rural Development Councils convened by SAGARPA to continue the dissemination and activation of the Commission for the Use of Biosolids; collected and analyzed all the information that has been obtained in the activities and supported the Project Director in writing the final report of the project. The final report will be delivered by June 30, 2018
2	20303	FS	N/A	**Healthy and Resilient Housing in west Ciudad Juarez, Chihuahua**	Federacion Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C.	Briselda Duarte (PM)	$ 50,000.00 $ 47,106.10	**Project Status:** Project progress of 98%; ecological technologies completed in 50 homes, manual on energy savings completed as well. Project will be finished on January 2018, waiting on final report and factsheet.
3	20302	FS	N/A	**Green Infrastructure in Public Space on Valle del Sol Avenue, Ciudad Juarez, Chihuahua**	Instituto Tecnológico de Ciudad Juarez	Joaquin Marrufo (PM)	$ 42,231.02 $ 42,231.02	**Project Status:** Project concluded on December 2017. Some of the most relevant outputs and outcomes are: Monitoring of rain water volume occurred during 17 months, from July 2016 to November 2017, with a total volume collected of 472,502.33 gallons of rainwater. To have a clearer understanding of the results, consider a 12-month period, where precipitation was of 13.79 in, resulting in a capture volume of 436,203 gal. Regarding the contaminants analyses, there was not enough rainwater volume to have a representative sample to be tested. In reference to the vegetation, there was an acceptable surviving index of the planted trees and bushes. The park has not had the need for irrigation, since rainwater does its part. Finally, with the green infrastructure project, the social value of the park increased.
						Amount Approved	$ 140,741.02	
						Amount Disbursed	$ 101,080.20	

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Goal/ Fund. Stategy	Objective	Project Name	Project Implementer / Contact Information	BECC Contract Officer & Project Manager	Amount Approved / Amount Disbursed	STATUS
1	20270	4	2	Hazardous Materials First Responders Binational Training in McAllen, Mission, Pharr, TX and Reynosa, Tamaulipas	City of McAllen Juan Gloria (956)681-2540 jgloria@mcallen.net	Marielena Constandse (CO) / Briselda Duarte (PM)	$ 25,055.00 $ 25,055.00	**Project Status:** Project concluded on February. Some of the significant project contributions are: - Increase hazmat response skills and capabilities to first responders in McAllen, Mission and Pharr Fire Departments and first responders from northern Mexico. - Equipment will also be used in future binational trainings.
2	20255	3	1	Comprehensive Solid Waste Management Project in Rio Bravo and Valle Hermoso, Tamaulipas	Secretaria de Medio Ambiente	Jorge Hernandez (PM)	$ 19,871.16 $ 19,871.16	**Project Status:** The two municipal programs have been completed, and in August 10 and 24 they were presented for approval by the respective city councils. Some of the significant project contributions are: + The generation and waste composition studies allow both communities to know the type and amount of waste generated per inhabitant and could be marketed. The studies also calculate the areas required for the final disposal site according to their generation. + Both programs have been completed, and presented for approval by the respective city councils.
3	20255	3	1	Interagency coordination for the management of electronic and electrical waste in Ciudad Acuna and Piedras Negras, Coahuila	Secretaria de Medio Ambiente del Estado de Coahuila de Zaragoza	Jorge Hernandez (PM)	$ 16,898.67 $ 16,898.67	**Project Status:** The project concluded in March 2017. The results of the project are: Collection of 56 tons of electronic waste (25 tons were targeted), which included 3 campaigns of massive collection of e-waste in several municipalities, 36 public and private organizations were trained and supported the campaign. A permanent collection of electronic waste was opened in Ciudad Acuña.

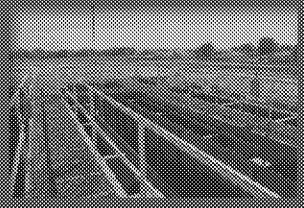
4	20297	4	2	Binational Tabletop and Functional Exercises between Harlingen, TX and Matamoros, Tamaulipas.	City of Harlingen Fire Department	Briselda Duarte (PM)	$ 44,682.30 $ 44,682.30	**Project status:** The project concluded in August. Some of the significant project contributions are: -Training of 19 officers and students from Harlingen (2), Mission (2), Brownsville (1) and Matamoros (14). -Harlingen and Matamoros have established the ability to implement standardized response and real time communication in the event of Hazardous Materials incidents. -A foundation for enhanced emergency response and cooperative incident management has been created
5	20297	2	2	**Decision Making Tool (DMT[G])** for Determining LID Stormwater Detention in Bronwsville, Texas	Texas A&M University-Kingsville	Jorge Hernandez (PM)	$ 38,885.00 $ 15,769.89	**Project Status:** Activities for this quarter include the development of a website for the project; the modeling runs for the Tool were completed in 2017 and the DMT, will be finalized and rolled out through workshops in Spring 2018. For this reason, a project no-cost extension is recommended and will be requested through July 31, 2018

Updated March 31, 2018

Amount Approved	$ 145,392.13
Amount Disbursed	$ 122,277.02

Total Approved	$ 286,133.15
Total Disbursed	$ 223,357.22

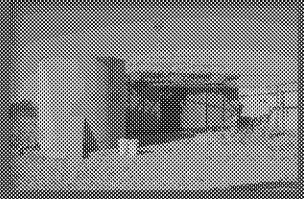
EPA Region 6



QUARTERLY REPORT

January – March 2018

US-MEXICO COOPERATIVE AGREEMENT
Implementation of Border 2020 Program
EPA-Region 6
X4-01F04901



Submitted by:
Javier Torres, Technical Assistance Manager

Banco de Desarrollo de América del Norte
North American Development Bank

QUARTERLY STATUS REPORT

US-MEXICO COOPERATIVE AGREEMENT
Implementation of Border 2020 Program
EPA-Region 6

GRANT: X4-01F04901

Grant Period: August 12, 2015 – October 31, 2019

REPORTING PERIOD:

January - March 2018

TO:

Monica Wilson
U.S. EPA, Region 6 (6PD)
Environmental Protection Specialist

FROM:

Javier Torres
North American Development Bank
Technical Assistance Manager

April 30, 2018, Cd. Juárez, Chihuahua, México

US Mexico Border 2020 Environmental Program - Quarterly Grant Status Report

Grant Title:	**Grant Agreement No.**
US – Mexico Border Cooperative Agreement Implementation of EPA Region-6 Border 2020 Program	X4-01F04901

Contact:

Primary Contact Name: **Javier Torres**
Organization: North American Development Bank
Telephone & Fax: 01-656-688-4600 Email: jtorres@nadb.org

Reporting Period (please check appropriate period):

- ☐ July 1 – September 30, 2017, Reporting period: report due on October 30, 2017
- ☐ October 1 – December 30, 2017, Reporting period: report due on January 30, 2018
- ☒ January 1 – March 31, 2018, Reporting period: report due on April 30, 2018
- ☐ April 1 – June 30, 2018, Reporting period: report due on July 30, 2018
- ☐ July 1 – September 30, 2018, Reporting period: report due on October 30, 2018
- ☐ October 1 – December 30, 2018, Reporting period: report due on January 30, 2019
- ☐ January 1 – March 31, 2019, Reporting period: report due on April 30, 2019
- ☐ April 1 – June 30, 2019, Reporting period: report due on July 30, 2019
- ☐ July 1 – August 30, 2019, Reporting period: report due on October 30, 2019

Check here if this is the final reporting period under your grant ☐

Please explain any current of expected growth of your project. If there is growth potential, have you consulted with other partners for further or future leveraging of funds, for continuing the project after funding from the Environmental Protection Agency ends?

No growth is expected for the projects under-development at this time.

Indicate the goal(s) and objective(s) of the Border 2020 Framework Document that this grant is addressing (http://www.epa.gov/border2020)

ED_002319B_00013630-00003

GOAL 1. - *Reduce Air Pollution*

Objective 1. - By 2020, in accordance with the NAFTA, promote the reduction of the number of vehicles operating in the border region that do not comply with the respective vehicle emissions' standards and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible reduction measures.

- **Project type 1:** Support the development of vehicle emissions programs in collaboration with governmental entities in order to improve compliance, enhance detection and correction of non-compliance vehicles. In addition, capacity building activities to reduce air pollution, in the border cities or at the Ports of Entry (POE), which may include the enforcement of environmental compliance at the time of used vehicle importation.

Objective 2.- By 2020, reduce pollutant emissions in order to approach attainment of respective national ambient air quality standards (i.e. National Ambient Air Quality Standards (NAAQS) or Norms as they are referred in Mexico) in the El Paso, Texas–Dona Ana County, New Mexico and at State of Chihuahua's border cities' air sheds.

- **Project type 1:** Establish joint collaboration strategies with governmental and/or non-governmental regulatory and planning agencies to identify and implement air pollutant reduction strategies to achieve better air quality in the Paso del Norte region (PdN). Projects should promote, expand, and be consistent with the strategies identified in PROAIREs (Mexico's air shed management plan) or U.S. Clean Air Act (USCAA) State Implementation Plans (SIPs.)

Objective 3. – By 2018, maintain effective Ambient Air Quality Monitoring Network (AAQMN) and provide real-time access to air quality data produced at New Mexico/Texas /Mexico air sheds.

- **Project Type 1:** Initiatives for this objective should aim to ensure the long term sustainability and data quality for the El Paso, Texas – Ciudad Juarez, Chihuahua air quality monitoring network.

Objective 5. - By 2020, reduce emissions and associated impacts through energy efficiency and/or alternative/renewable energy projects.

Possible projects could include: Border-wide training for border stakeholders in instituting and sustaining urban energy efficiency measures; green building training/workshops; forums in which states, localities, non-governmental organizations (NGOs) and industry can share program information and technologies; and energy efficiency co-benefits through reduction of criteria air contaminant emissions (stationary and vehicle sources)

GOAL 2: *Water – Improve Access to Clean and Safe Water*

- **Project type 1:** Efforts under this goal should be targeted to capacity building proposals that incorporate replication strategies, on proper maintenance and/or decommissioning of septic tanks, water conservation and pollution prevention in order to better understand, plan and maintain cleanup sources of drinking water on future groundwater supplies in New Mexico-Texas-Chihuahua border, specifically in Dona Ana County, New Mexico (particularly those communities along the corridor between El Paso, Texas and Las Cruces, New Mexico) and Luna County, New Mexico and El Paso County, Texas.

ED_002319B_00013630-00004

Objective 2. - Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.

- **Project type 1:** Conduct energy and/or water audits on small water drinking systems that serve communities with less than a population of 5,000 users, to identify recommendations on how to improve efficiency and provide cost-savings measures for that system.
- **Project type 2:** Outreach and education to improve water quality within the Gulf Task Force Region.

Objective 3. - Work bi-nationally to identify and reduce surface water contamination in Trans - boundary water bodies and watersheds.

Objective 3a. - Develop a binational watershed protection plan in the Lower Rio Grande below Falcon International Dam. Initial activities could include partnership building, watershed characterization, definition of goals/identification of solutions, determination of waste load, load allocations for each country, and development of an implementation plan.

- **Project type 1:** Continue to support activities that meet objective 3a– The proposals should address any water quality sampling and collection, data analysis, modeling and surveys still required by the bi-national workgroup on this project. In addition, the work should also support any additional training or workshops needed, among others, by the Amistad and Falcon Task Force, as well by the Texas-Coahuila-Nuevo Leon –Tamaulipas, Regional Work Group.

GOAL 3: ***Promote Materials Management & Waste Management, & Clean Sites***

Objective 1. - By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.

- **Project type 1**: Proposals should be aimed to build capacity and establish strategies to improve infrastructure to minimize waste, maximize collections systems, support secondary materials markets, and reduce overall disposal in landfills and open dumps.

Objective 2. - Identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.

- **Project type 1:** Identify priority waste streams in the municipalities from Four States region and develop sustainable waste management programs for those municipalities to include strengthening the market value of the waste.
- **Project type 2:** Develop sustainable management practices to address used electronics, household hazardous waste, and tires in the Region which will include an educational component to promote recycling and solid waste practices.

ED_002319B_00013630-00005

GOAL 4: ***Enhance Joint Preparedness for Environmental Response***

Objective 2. - By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building

- **Project type 1:** Conduct bi-national training to both U.S. and Mexican local emergency responders, on incidents involving Chemical, Biological, Radiological, Nuclear, or Explosive (CBRNE), and/or all hazards response skills enabling them to respond safely and effectively to these types of incidences.
- **Project type 2:** Conduct bi-national training to U.S. and Mexican local emergency responders, specifically on HAZMAT incidences only.
- **Project type 3:** Conduct bi-national: 1) tabletop drill with functional drill/exercise or 2) Full Scale Drill/Exercises to test local sister city plans. In order to meet the definition of bi-national, the drills/exercises should go beyond a simple notification to the local sister-city pair and demonstrate actual coordination of resources (expertise, equipment, personnel, etc.) between the sister-cities.
- **Project type 4:** Develop a hazardous materials risk analysis.

GOAL 5. – Enhance ***Compliance Assurance and Environmental Stewardship***

Objective 4. - By 2020, implement at least five (5) binational workshops targeted to environmental enforcement professionals, including ports-of-entry customs professionals (i.e. Department of Homeland Security-Customs and Border Protection), to promote the exchange of information and improve understanding of each Country's respective compliance and enforcement programs and tools, including field studies.

- **Project type 1:** Proposals should consider events for information exchange to improve understanding each Country's respective compliance and enforcement programs and tools including field inspections and case development practices.

Fundamental Strategies

Promoting Environmental Health

- **Project type 1:** Projects presented under this fundamental strategy should increase engagement and participation by the community and stakeholders to better manage the environment and public health issues along the border.

Building Capacity towards Climate Change Resiliency

- **Project type 1**: The Border 2020 climate change efforts should focus on reducing greenhouse gas (GHG) emissions and on actions to help border communities become more resilient to the effects of climate change.

ED_002319B_00013630-00006

Summary of approved Work Plan activities performed during the reporting quarter.
Projects in progress during reporting period:

Project ID	Goal / Fund. Strategy	Objective	Project Name	Status
20288	1	1	Improvements to Environmental Services in Cattle Ranches via Livestock Grazing, Ascensión, Chihuahua.	Project Status: Project delayed, final due date May 2018. Tasks to be finished: groundwater monitoring, air monitoring, and soil carbon monitoring.
20290	2	3	The Rio Grande/Río Bravo Water Quality Initiative, Laredo, Texas.	Project Status: CILA requested a new facilitator to join the team; as a result, focus group meetings will likely occur in May. A project extension request was approved; completion date is June 2018.

Summary of the Work Plan performance outputs/outcomes achieved during the reporting quarter.

There are no performance outputs and outcome to report at the project level.

Are you on track with your timeline? **Yes** ☒ **No** ☐

A description of problems encountered during the reporting quarter that may affect the project schedule and a discussion of meeting the performance outputs/outcomes.

No problems have been reported.

Resolutions to Problems Previously Reported.

No problems have been reported.

Activities Anticipated/Planned for Next Three Months and Budgeted Costs.

- Coordinate with the sponsors the implementation of the active projects in accordance with the approved workplans.

- Nine projects were selected for implementation and funding under this grant. Activities for the next three months include coordinating with the sponsors the implementation of the projects in accordance with the approved workplans.

- Five projects were selected for Three State Region under this grant:
    1. Climate and Air Quality Network UACJ, Ciudad Juarez, CHIH.
    2. Reduction of Emissions Through Collective Transportation Infrastructure, Ciudad Juarez, CHIH / El Paso, TX.
    3. Safe Drinking Water for US/Mexico Border Colonias, El Paso, TX and Ciudad Juarez, CHIH.
    4. RESET 17: Innovation for the Future, El Paso, TX and Ciudad Juarez, CHIH.
    5. Green Infrastructure in the Paso del Norte Region: Seminar, Implementation Guide, Ciudad Juarez, CHIH.

- Three projects were selected for Four States Region under this grant:
    1. Strategy for Reduction and Prevention of Disasters in Ciudad Acuña, COAH.
    2. Agrochemicals and their Risks to Health and the Environment, Frontera de Tamaulipas
    3. Transforming Urban Compacted Land into Infiltration Field, Edinburg, TX

- One project was selected border wide under this grant:
    1. U.S.-Mexico Borderlands GIS Mapping, BORDER WIDE.

Discuss what key personnel did on the project.

Joaquin Marruffo provided overall project coordination as well as the communication with EPA. Briselda Duarte, and Jorge Hernandez manage the implementation of the projects in close coordination with EPA. Marielena Constandse prepared this report. Marielena Constandse, Abril Quiroz and Javier Torres provided RFP coordination and Grant Administration.

Discuss any changes in key personnel.

There are no changes to report.

Please name any significant partner organizations that you (as the lead organization) have for this project, who are taking responsibility for substantial portions of implementation.

N/A

BUDGET SUMMARY - Include information on the expenditure of grant agreement funds during the quarter and cumulatively by task in the provided budget tables. The tasks should correspond to the tasks outlined in your approved grant agreement work plan and the tables may be expanded accordingly. In addition, include in your narrative an estimate of funds needed to complete the work required in the grant agreement compared to the funds remaining in the grant agreement. ***Note: This section does not substitute for the annual financial status report (SF-269) required by the grant agreement.***

TABLE 1

Summary of Quarterly Expenses by Category (Report Period January 1 to March 31, 2018)

Work Plan Tasks	Approved Work Plan Budget	Previously Expended	Expenses this Quarter	Total Cumulative Expenses
Task A - RFP	$108,091	$94,589	$11,676	$106,265
Task B - Projects	$600,584	$152,352	$0	$152,352
Task C – Logistical Support	$23,143	$0	$0	$0
Indirect Cost	$73,182	$24,694	$1,168	$25,862
TOTAL Cumulative Expenses	**$805,000**	**$271,636**	**$12,843**	**$284,479**

TABLE 2

Budget Categories (programmatic costs only)	Task A- RFP	Task B- Projects	Task C- Logistical Support	TOTAL Quarterly Expenses
Personnel	$10,115.19	$0	$0	$10,115.19
Fringe Benefits	$1,560.35	$0	$0	$1,560.35
Travel	$0	$0	$0	$0
Contractual	$0	$0	$0	$0
Other (specify)	$0	$0	$0	$0
TOTAL Direct Charges	$11,675.54	$0	$0	$11,675.54
Indirect Costs	$1,167.56	$0	$0	$1,167.56
TOTAL Cumulative Expenses	$12,843.10	$0	$0	$12,843.10

ED_002319B_00013630-00009

What is the geographic scope of your project implementation? *(Include whether it is within the Tri-State and/or Four-State Region of Border 2020, whether implementation takes place in both the U.S. and Mexico, and any more specific implementation.)*

The geographic scope of this award covers the Tri-State Region, which includes the states of New Mexico, Chihuahua and the West Texas region; and the Four-State Region which includes the rest of Texas, Coahuila, Tamaulipas and Nuevo Leon.

I certify that this report is true and correct, project is on schedule except as noted, and funds are being utilized as planned and agreed to in the award document.

Signature of Project Official:

Printed Name: Javier Torres

Title: Technical Assistance Manager **Date:** April 30, 2018

Within 30 days following the end of each quarter, please submit this report to your EPA Project Officer.

ATTACHMENT "A"

THREE STATE (TX-CHIH-NM) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20288	**Improvements to Environmental Services in Cattle Ranches via Livestock Grazing, Ascensión, Chihuahua.**	Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología	Ascension, Chih.	Briselda Duarte (PM)	7/15/2016	$ 41,388.00	**Project Status:** Project delayed, final due date May 2018. Tasks to be finished: groundwater monitoring, air monitoring, and soil carbon monitoring.
						7/31/2017	$ 23,031.84	

Amount Approved	$	41,388.00
Amount Disbursed	$	23,031.84

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20283	**Energy Efficiency Workshop for Public Lighting Systems, Reynosa, Tamaulipas.**	Secretaria de Desarrollo Urbano y Medio Ambiente	Reynosa, Tamps.	Briselda Duarte (PM)	2/22/2016 5/2/2016	$ 9,330.33 $ 9,330.33	Project Status: Concluded on August 2016. Technical training provided to 30 technical officials from the municipalities of Nuevo Laredo, Guerrero, Mier, Miguel Aleman, Camargo, Diaz Ordaz, Reynosa, Rio Bravo, Valle Hermoso and Matamoros, Tamaulipas. Thirty (30) energy efficiency guidelines including maintenance recommendations to reduce Kwh electrical consumption were revised.
2	20293	**Legislative Reform and Environmental Education, Nuevo Laredo, Tamaulipas.**	Universidad Autónoma de Tamaulipas en Nuevo Laredo	Nuevo Laredo, Tamps.	Briselda Duarte (PM)	5/26/2016 5/2/2017	$ 11,000.00 $ 9,078.04	Project Status: Project Status: Work Plan activities were completed. Nuevo Laredo upgraded its municipal code. More than 2000 students and 20 inspectors informed.
3	20295	**Comprehensive E-Waste Management in Piedras Negras, Coahuila and Eagle Pass, Texas.**	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	Piedras Negras, Coahuila and Eagle Pass, Texas	Jorge Hernandez (PM)	1/21/2016 7/18/2017	$ 35,054.00 $ 25,270.21	Project Status: Project concluded on August 2017. Some of the project significant contributions are: 47 tons of e-waste collected in Piedras Negras and 15 tons in Eagle Pass. 40,000 inhabitants were visited in 22 colonias in Piedras Negras. A workshop was conducted at ITPN for 55 Green TEC associates. A health and environment conference was held to promote the e-waste recycling. The main promotion of the project was a walk performed in March 2016 with more than 1200 participants. A permanent collection center was established in the public works department at Piedras Negras.
4	20290	**The Rio Grande/Rio Bravo Water Quality Initiative, Laredo Texas**	The University of Texas at Austin	Laredo, TX.	Briselda Duarte (PM)	2/22/2016 8/31/2017	**$58,575.00** **$ 30,260.16**	**Project Status:** CILA requested a new facilitator to join the team; as a result, focus group meetings will likely occur in May. A project extension request was approved; completion date is June 2018.

5	20291	**Fat, Oil and Grease (FOG) Public Outreach Campaign, Brownsville, Texas**	Brownsville Public Utilities Board	Brownsville, TX	Briselda Duarte (PM)	2/22/2016 2/2/2017	**$21,471.05** $ 21,471.05	**Project Status:** Project concluded on May 2017. Some of the project significant contributions are: • 12.56% reduction in service calls received by BPUB related to fats, oil and grease issues • 84 public outreach and trainings • 1713 participating residents and business owners.
6	20293	**Awareness and Discharge Control Project**	Unidos de Rio Grande Colonias de Cameron, Hidalgo and Willacy Counties	Brownsville, Texas	Briselda Duarte (PM)	TBD TBD	$75,000.00	**Project Status:** Canceled due to an unacceptable high bidder price to implement the wastewater residential code. It was suggested to resubmit for funding in future LDFE, when the cluster of projects is better defined.
7	20294	**Let's Clean it Up and Green it Up, Pharr, Texas**	City of Pharr, Recycling Center	Pharr, TX	Jorge Hernandez (PM)	2/22/2016 4/2/2017	$ 33,910.47 $ 33,910.47	**Project Status:** Project concluded on May 2017. Some of the project significant contributions are: The city of Pharr participated on over 100 occasions where environmental education was discussed. More than 20 meetings, 40 events and about 50 presentations were given to students and/or residents on environmental issues. During the 14-month period of the project implementation, over 20,000 used tires were collected. The project included the 96-gallon recycling containers for advertising purposes.

Updated March 31, 2018

Amount Approved	$	195,340.85
Amount Disbursed	$	129,320.26

Total Approved	$	236,728.85
Total Disbursed	$	152,352.10

THREE STATE (TX-CHIH-NM) BORDER 2020 - 2017 PROJECTS

No.	Project ID	Goal / Fund. Strategy	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20325	1	**Climate and air quality network UACJ, Ciudad Juarez, CHIH.**	Universidad Autónoma de Ciudad Juárez Víctor Hernández Jacobo vihernan@uacj.mx	Ciudad Juarez, CHIH.	JH/AQ		$ 29,400.00	**Project Status:**
2	20326	1	**Reduction of Emissions Through Collective Transportation Infrastructure, Ciudad Juarez, CHIH / El Paso TX.**	IMIP Juárez Álvaro Roberto Manuel Mora Palacios/ Alberto Nicolás López Duarte nlopez@imip.org.mx imip@imip.org.mx	Ciudad Juarez, CHIH / El Paso TX	JH/AQ		$ 61,220.00	**Project Status:**
3	20327	2	**Safe drinking water for US/Mexico border Colonias, El Paso TX and Ciudad Juarez CHIH.**	UTEP Ivonne Santiago isantiago@utep.edu	El Paso TX and Ciudad Juarez CHIH.	BD/AQ		$ 79,636.00	**Project Status:**
4	20314	2	**RESET 17: Innovation for the Future, El Paso, TX and Ciudad Juarez, CHIH.**	Fundación AXCEL A.C. Nancy Estrada nancy@funax.org	El Paso, TX and Ciudad Juarez, CHIH.	BD/AQ		$ 29,444.44	**Project Status:**
5	20321	GI	**Green infrastructure in the Paso del Norte Region: Seminar, Implementation Guide, Ciudad Juarez, CHIH.**	Secretaría Técnica del Municipio de Juárez Alejandro César Loaeza Canizales Alejandro.loaeza@juarez.gob.mx aleloaeza2011@hotmail.com	Ciudad Juarez, CHIH.	JM/AQ		$ 31,000.00	**Project Status:**

Amount Approved	$	230,700.44
Amount Disbursed	$	-

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2020 - 2017 PROJECTS

No.	Project ID	Goal / Fund. Strategy	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20330	2	**Strategy for Reduction and Prevention of Disasters in Ciudad Acuña, COAH.**	Universidad Carolina Cecilia Pelletier Bravo pelletier.cecilia@gmail.com y/o esteban.fish@gmail.com	Ciudad Acuña, COAH.	BD/AQ		**$ 26,035.00**	**Project Status:**
2	20331	FS	**Agrochemicals and Their Risks to Health and the Environment, Tamaulipas Border area**	Secretaría de Desarrollo Urbano y Medio Ambiente Celestino Alanís Leal celestino.alanis@tamaulipas.gob.mx	Tamaulipas Border	SV/AQ		**$21,946.00**	**Project Status:**
3	20329	GI	**Transforming Urban Compacted Land into Infiltration Field, Edinburg, TX**	The University of Texas Rio Grande Valley Andrew Lawler sponpro@utrgv.edu	Edinburg, TX	SV/AQ		**$58,925.00**	**Project Status:**

Amount Approved	$	106,906.00
Amount Disbursed	$	-

BORDER WIDE BORDER 2020 - 2017 PROJECTS

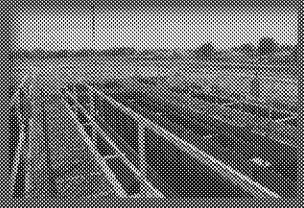
No.	Project ID	Goal / Fund. Strategy	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1		3	**U.S.-Mexico Borderlands GIS Mapping, BORDER WIDE**	U.S.-Mexico Border Philanthropy Partnership Andy Carey Andy@borderpartnership.org	Border Wide	JM/AQ		$ 25,000.00	**Project Status:**

Updated March 31, 2018

Amount Approved	$	25,000.00
Amount Disbursed	$	-

Total Approved	$	362,606.44
Total Disbursed	$	-

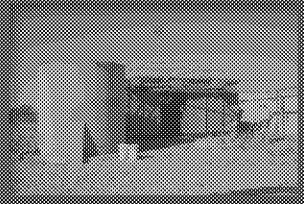
EPA Region 6



QUARTERLY REPORT

January – March 2018

US-MEXICO COOPERATIVE AGREEMENT
Implementation of Border 2020 Program
EPA-Region 6
X4-00F59501



Submitted by:
Javier Torres, Technical Assistance Manager

Banco de Desarrollo de América del Norte
North American Development Bank

QUARTERLY STATUS REPORT

US-MEXICO COOPERATIVE AGREEMENT
Implementation of Border 2020 Program
EPA-Region 6

GRANT: X4-00F59501-3

Grant Period: Sep. 6, 2012 – Aug. 31, 2019

REPORTING PERIOD:

January - March 2018

TO:
Monica Wilson
U.S. EPA, Region 6 (6PD)
Environmental Protection Specialist

FROM:
Javier Torres
North American Development Bank
Technical Assistance Manager

April 30, 2018, Cd. Juárez, Chihuahua, México

US Mexico Border 2020 Environmental Program - Quarterly Grant Status Report

Grant Title:	**Grant Agreement No.**
US – Mexico Border Cooperative Agreement Implementation of EPA Region-6 Border 2020 Program	X4-00F59501

Contact:

Primary Contact Name: **Javier Torres**
Organization: North American Development Bank
Telephone & Fax: 01-656-688-4600 Email: jtorres@nadb.org

Reporting Period (please check appropriate period):

- ☐ October 1 – December 31, 2017, reporting period: report due on January 30, 2018
- ☒ January 1 – March 31, 2018, reporting period: report due on April 30, 2018
- ☐ April 1 – June 30, 2018, reporting period: report due on July 30, 2018
- ☐ July 1 – September 30, 2018, reporting period: report due on October 30, 2018
- ☐ October 1 – December 31, 2018, reporting period: report due on January 30, 2019
- ☐ January 1 – March 31, 2019, reporting period: report due on April 30, 2019
- ☐ April 1 – June 30, 2019, reporting period: report due on July 30, 2019
- ☐ July 1 – August 31, 2019, reporting period: report due on October 30, 2019

Check here if this is the final reporting period under your grant ___

Please explain any current of expected growth of your project. If there is growth potential, have you consulted with other partners for further or future leveraging of funds, for continuing the project after funding from the Environmental Protection Agency ends?

Not considered during this period.

Indicate the goal(s) and objective(s) of the Border 2020 Framework Document that this grant is addressing (http://www.epa.gov/border2020)

Goal #1: Reduce Air Pollution

- ☒ Continue to focus on air pollution reductions in binational airsheds

ED_002319B_00013636-00003

☒ By 2018, maintain effective air quality monitoring networks and timely access to air quality data

☒ Reduce greenhouse gas emissions through energy efficiency and alternatives or renewable energy projects

Goal #2: Improve Access to Clean and Safe Water

☒ By 2015, increase homes connected to safe drinking water (DW) and waste water (WW) treatment

☒ Help DW and WW utilities become more efficient and sustainable

☒ Reduce levels of metals, sediment, or bacteria entering rivers and watersheds

Goal #3: Promote Materials and Waste Management and Clean Sites

☒ Develop capacity to improve collection and recycling of e-waste, plastics, and trash

☒ Develop scrap tire pile prevention and recycling capacity

☒ Develop institutional capacity to clean up contaminated sites

☒ Continue to share information on border area hazardous waste facilities

Goal #4: Enhance Joint Preparedness for Environmental Response

☒ Update eight sister city joint contingency plans with risk identification and reduction of all hazards

☒ Facilitate easier trans-boundary movement of equipment and personnel

☒ Continue updating the U.S.-Mexico Joint Contingency Plan

Goal #5: Compliance Assurance and Environmental Stewardship

☒ Improve information sharing between enforcement agencies on the movement of hazardous waste across the border

☒ Use Toxics Release Inventory (in the U.S.) and the Emissions and Contaminant

☒ Transfer Registry (RETC, in Mexico) to identify top polluters of toxic releases

ED_002319B_00013636-00004

☒ Training and information exchange on laws and regulations of respective countries

Summary of approved Work Plan activities performed during the reporting quarter.

The Bioswale Material for South Texas Stormwater Management project concluded on March 2017. Results include that after monitoring rain fall from April 2015 to November 2016, of the five porous materials used in the different parking areas pumice is a hydrologically best performing material for the bioswale porous media.

Overall logistical support for the year was provided for:

- New Mexico – Texas – Chihuahua Waste Task Force meeting, held on February 7, 2017 in Cd. Juarez, Chihuahua.
- New Mexico – Texas – Chihuahua Regional Workgroup Annual Meeting, held on February 14, 2017 in El Paso, Tx.
- Texas- Coahuila – Nuevo Leon – Tamaulipas Regional Workgroup Meeting, held on February 16, 2017 in Laredo, Tx.
- Paso Del Norte Binational Health Council-Environmental Health Committee held on March 22, 2017 in El Paso, Tx.
- Junta de los Rios (Texas – Chihuahua) Rural Task Force Meeting held on March 2, 2017 in Presidio TX
- New Mexico – Chihuahua Rural Task Force Annual Public Meeting held on March 30, 2017 in Palomas, Chih.
- New Mexico – Texas – Chihuahua Health Task Force Public Meeting held on March 30, 2017 in Las Cruces, NM.
- Extreme Heat and Health: Prevention, Mitigation, and Resilience in the Paso del Norte Region Meeting held on May 24th in Juarez, Chihuahua and El Paso, TX.

Summary of the Work Plan performance outputs/outcomes achieved during the reporting quarter.

One project started in this grant:

- Collaborative K12 Capacity Building and Research for Air Quality Monitoring.

Project status: Project had its kickoff meeting on March and will be presented on the next JAC meeting to be held on May. Initial design work is being done.

Are you on track with your timeline? **Yes** ☒ **No** ☐

A description of problems encountered during the reporting quarter that may affect the project schedule and a discussion of meeting the performance outputs/outcomes.

No problems have been reported.

Resolutions to Problems Previously Reported.

No problems have been reported.

Activities Anticipated/Planned for Next Three Months and Budgeted Costs.

- Review and finalize selected proposal workplans and continue with the Technical Assistance process.
- Two selected projects are proposed for development and funding by this grant:
  - Four States Region:
    - Waste Separation Stations, Matamoros, TAMPS.
    - Mitigating Localized Flooding - Development of a Green Infrastructure Master Plan, Mercedes, TX.

Discuss what key personnel did on the project.

Joaquin Marruffo provided overall project coordination as well as the communication with EPA. Briselda Duarte and Jorge Hernandez coordinated and monitored work plan activities of the projects in coordination with EPA. Marielena Constandse prepared this report. Marielena Constandse, Abril Quiroz and Javier Torres provided internal contract and grant administration and grant administration coordination with EPA.

Discuss any changes in key personnel.

No changes in key personnel took place this reporting period.

Please name any significant partner organizations that you (as the lead organization) have for this project, who are taking responsibility for substantial portions of implementation.

N/A

BUDGET SUMMARY - Include information on the expenditure of grant agreement funds during the quarter and cumulatively by task in the provided budget tables. The tasks should correspond to the tasks outlined in your approved grant agreement work plan and the tables may be expanded accordingly. In addition, include in your narrative an estimate of funds needed to complete the work required in the grant agreement compared to the funds remaining in the grant agreement. ***Note: This section does not substitute for the annual financial status report (SF-269) required by the grant agreement***.

TABLE 1				
Summary of Quarterly Expenses by Category (Report Period January 1 to March 31, 2018)				
Work Plan Tasks	**Approved Work Plan Budget**	**Previously Expended**	**Expenses this Quarter**	**Total Cumulative Expenses**
Task A- Logistics	$52,688	$52,668	$0	$0
Task B- RFP	$40,972	$40,972	$0	$0
Task C- Projects	$683,314	$559,984	$0	$0
Task D- NADB Presence	$30,579	$30,579	$0	$0
Task E- Emergency Response	$45,455	$45,455	$0	$0
Indirect Cost	$81,012	$73,169	$0	$0
TOTAL Cumulative Expenses	**$934,000**	**$802,827**	**$0**	**$0**

TABLE 2						
Budget Categories (programmatic costs only)	**Task A- Logistics**	**Task B- RFP**	**Task C- Projects**	**Task D- BECC Presence**	**Task E- Emergency Response**	**TOTAL Quarterly Expenses**
Personnel	$0	$0	$0	$0	$0	$0
Fringe Benefits	$0	$0	$0	$0	$0	$0
Travel	$0	$0	$0	$0	$0	$0
Contractual	$0	$0	$0	$0	$0	$0
Other (specify)	$0	$0	$0	$0	$0	$0
TOTAL Direct Charges	$0	$0	$0	$0	$0	$0
Indirect Costs	$0	$0	$0	$0	$0	$0
TOTAL Cumulative Expenses	$0	$0	$0	$0	$0	$0

What is the geographic scope of your project implementation? *(Include whether it is within the Tri-State and/or Four-State Region of Border 2020, whether implementation takes place in both the U.S. and Mexico, and any more specific implementation.)*

The geographic scope of this award covers the Tri-State Region, which includes the states of New Mexico, Chihuahua and the West Texas region; and the Four-State Region which includes the rest of Texas, Coahuila, Tamaulipas and Nuevo Leon.

I certify that this report is true and correct, project is on schedule except as noted, and funds are being utilized as planned and agreed to in the award document.

Signature of Project Official:

Printed Name: Javier Torres

Title: Technical Assistance Manager **Date:** April 30, 2018

Within 30 days following the end of each quarter, please submit this report to your EPA Project Officer.

ATTACHMENT "A"

THREE STATE (TX-CH-NM) BORDER 2020 - 2013 PROJECTS											
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer	Contact Information	Project Location	State	PM	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20249	1	Mejoramiento de la Red de Monitoreo de PM10 en Ojinaga	Municipio de Ojinaga, Chihuahua	Ing. Miguel Adame Baeza; moadameb@hotmail.com; (626)453-2541	Ojinaga	CHIH	IH AQ	4/15/2014 17 months	$ 13,175.35 $ 13,175.35	**Project Status:** This project concluded on September 2015. Some of the project significant contributions were: * A network of monitoring of PM10 fully functional. * Three training events for technical personnel * Development of a Communications Plan for air quality data through local media and information materials.
2	20260	2	Sustaining the Environment at the New Mexico-Chihuahua Border	New Mexico Environment Department	Ms. Mary Rose Mary.Rose@state.nm.us	Columbus, Deming	NM	BD MC	11/4/2014 13 months	$ 36,953.43 $ 36,953.43	**Project Status:** This project concluded on December 2015. $63,037 dlls. were returned to the grant. Some of the project significant contributions were: * Completion of two presentations on health impacts and effective, low-cost methods for controlling blowing sand and soil. * Completion of four septic maintenance workshops. * Organization of the largest ever water festival held in Columbus, NM.
3	20240	2	Comunidades Unidas en Prevencion de la Contaminacion Ambiental	Adult Youth United Development Association INC	Olivia Figueroa Executive Director ayudaorg1@yahoo.com; (915) 851-0272	Montana Vista, Cuadrilla, Tornillo	TX	BD AQ	5/1/2014 16 months	$ 49,776.41 $ 49,776.41	**Project Status:** This project concluded on September 2015. Some of the project significant contributions were: * Training program outreach, 2,332 people *Identification of septic tanks with GIS, 467 houses *Surveys conducted, 462 *Creation of mapping and database in Cuadrilla, Montana Vista, Tornilo, and Valle Bonito at El Paso County
4	20262	3	Ysleta del Sur Pueblo Community Collection Center	Ysleta del Sur Pueblo	Evaristo Cruz; ecruz@ydsp-nsn.gob; (915)859-7913 ext 7755	El Paso	TX	IH MC	10/1/2014 18 months	$ 65,776.92 $ 65,776.92	**Project Status:** Project finished on April 2015. The main results of the project were: * Collection of a total of 250 tires. * 10,800 pounds of electronic waste collected. 42.35 lbs per household during a 14 month period an estimate of 1.4 lbs per household per month. * 5,420 pounds of recyclables collected. 21.25 lbs per household in a 14 month period an estimate of 4.3 lbs per household per month.
5	20247	3	Reciclaje de Biosolidos en Suelos Agricolas del Valle de Juarez, Chihuahua	Universidad Autónoma de Ciudad Juarez Servicos Agropecuarios Paso del Norte, SC	Dr. Juan Pedro Flores Margez Tels. 656-688-1800 ext. 1561, 1976 y 1671 Lic. Ana Irene Flores Arras	Valle de Juarez Valle de Juarez	CHIH CHIH	IH AQ IH AQ	4/13/2014 19 months 4/13/2014 19 months	$ 28,329.78 $ 28,329.78 $ 8,406.38 $ 8,406.38	**Project Status:** The Project was concluded on December 2015. Some of the project significant contributions were: The project established a sustainable program on agricultural use of biosolids, through 15 demonstration hectares. Important outputs are: * Establish a program promoting the adoption by farmers on the use of biosolids on agricultural land. * A list of volunteer farmers to continue the application of biosolids on 100 hectares in 2015 * Three field demonstrations, educational materials for 150 producers and agricultural technicians in the region.

6	**20245**	**Environmental Health**	Urban Keyhole Gardens using Rain Water Harvesting Techniques	El Paso Water Utilities Anai I. Padilla El Paso Water Utilities Phone: 915.621.2000 Email: aipadilla@epwu.org	El Paso	TX	AH AQ	4/7/2015 13 months	$ 6,120.08 $ 6,120.08	**Project Status:** The project concluded on May 2015. Some of the project significant contributions were: 14 educational events, with a total of 955 attendees. The overall acceptance of the keyhole gardens, as a vegetable gardening option was well received by the public that attended the various workshops. Final report has been submitted and approved.
7	20250	Environmental Health	[illegible]	[illegible]	[illegible]	[illegible]	AH AQ	[illegible]	$ [illegible]	Project Status: [illegible]

$	251,826.36
$	208,750.36

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2013 PROJECTS											
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer / Contact Information	Project Location	State	PM	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed		STATUS
1	20241	1	Characterizing Drayage Activities and Emissions in Laredo-Nuevo Laredo Airshed	Texas A&M Transportation Institute (TTI) Farzaneh, Reza Research Engineer m-farzaneh@tamu.edu (512) 407-1118	Laredo	TX	JH AQ	9/1/2014 18 months	$ $	89,750.00 89,750.00	**Project Status:** The project concluded on March 2016. Some of the project significant contributions were: Important air quality impacts of drayage trucks in the region; specifically, the results show that the Colombia bridge crossing is the most utilized port of entry in the region, and is associated with relatively high emissions caused by high truck volumes and slow speeds, therefore high emissions adjacent to urban area of both Laredos.
2	20258	2	Determining the Ideal Bioswale Material for South Texas Stormwater Management	The University of Texas Pan American Jungseok Ho, Ph.D., P.E. (956) 665-3104, hoj@utpa.edu	Edinburgh	TX	AH AQ	12/1/2014 24 months	$ $	24,133.69 24,133.69	**Project Status:** The Bioswale Material for South Texas Stormwater Management project concluded on March 2017. Results include that after monitoring rain fall from April 2015 to November 2016, of the five porous materials used in the different parking areas pumice is a hydrologically best performing material for the bioswale porous media
3	20245	2	Conservación del Arroyo Las Vacas en Ciudad Acuña, Coahuila, Mexico	SECRETARÍA DE MEDIO AMBIENTE DEL ESTADO DE COAHUILA Alejandra Carrera alejandra.carrera@semarnat.gob.mx (844) 4100014	Acuña	COAH	BD AQ	7/14/2014 22 months	$ $	34,605.92 34,605.92	**Project Status:** The project concluded on May 2016. Some of the project significant contributions are: a) Binational group created among SEMA Coahuila, TCEQ, Acuna City, Tec of Acuna, CILA, IBWC, UT Austin CONANP. b) Diagnostic Report with inventory data of existing vegetation and species along the 26km of the Acuña river, GIS maps accessible to the public. c) Close out of 35 wastewater illegal dumping sites in 2015. d) Reforestation with 225 native trees. e) Binational workshop on water quality with Tecnologico de Acuña and Texas A&M at Austin.
4	20246	3	Diagnóstico de generación de residuos en la región fronterizo norte	Secretaría de Desarrollo Sustentable, Gobierno del Estado de Nuevo León Lic. Norma Rangel Sevilla, normaarangel@gmail.com, (81)2033-1930	Sabinas Hidalgo, NL	NL	JH MC	4/1/2014 15 months	$ $	17,457.39 17,457.39	**Project Status:** This project concluded on August 2015. Some of the project significant contributions were: * Characterization of waste in the municipality * Generation of a manual on handling e-waste * Action plan developed
5	20243	3	Keeping Pharr Beautiful Starts at Home	City of Pharr, Public Works Department Grace Segovia, M.A. City of Pharr, Public Works Department Phone: (956) 402-4350 grace.segovia@pharr-tx.gov	Pharr	TX	AH AQ	4/7/2014 20 months	$ $	19,830.86 19,830.86	**Project Status:** This project concluded on December 2015. Some of the project significant contributions were: * The reduction in illegal dumping cases from 350 in 2013 to 100 in 2014 * The number of tires collected by city workers decreased from 4,991 in 2013 to 4,520 in 2014.

6	20255	3	Alamo Recycling TEAM Includes Everyone (ARTIE)	City of Alamo Melisa Gonzales Storm Water Manager Phone: 956-787-0006 x 140 mgonzales@alamotexas.org	Alamo	TX	AH AO	4/21/2014 24 months	$ $	54,836.16 54,836.16	**Project Status:** Project concluded on May 2016. Some of the significant project contributions are: 1. Development and implementation of a proven sanitation model that can be easily replicated in other drains in Mexicali and other border cities. 2. Established the governance structure for the implemenration of this model in other drains in Mexicali that ensures continued collaboration and coordination among government agencies, non-governmental organizations, and community groups. 3. Community members along the International Drain believe, once again, that illegal dumping in the drain can be eliminated.
7	20253	3	Manejo, Gestión y Control de Grasas y Aceites	Comisión Municipal de Agua Potable y Alcantarillado Marisela Flores floresmariela@hotmail.com (867) 712-5399	Nuevo Laredo	TAMPS	BD MC	6/3/2014 17 months	$ $	6,497.10 6,497.10	**Project Status:** This project concluded on February 2016. Some of the project significant contributions were: 449 establishments trained, giving them the necessary tools to establish procedures in its companies to raise their compliance, to strengthen the compromise among employees, creating a synergy with the operator body. 94 of these establishments will continue to be monitor by COMAPA to ensure environmental compliance and 13 establishments set up lats and oils traps. 88% of visited users comply with established procedures and are implementing the strategies presented in the workshops.
8	20252	Environmental Health	Promotora-Led Environmental Health Education for Children	La Amistad AHEC / Southwest Border AHEC Rose Martinez 830.758.1111 rose.martinez@swbahec.org	Eagle Pass	TX	AH MC	6/16/2014 17 months	$ $	69,023.50 69,023.50	**Project Status:** Project concluded on May 2016. Some of the significant project contributions are: 1. Development and implementation of a proven Sanitation Model that can be successfully replicated in other drains in Mexicali and other border cities. 2. Established the governance structure for the implementation of this model in other drains in Mexicali that ensures continued collaboration and coordination among government agencies, non-governmental organizations, and community groups. 3. Community members along the International Drain believe, once again, that illegal dumping in the drain can be eliminated.
9	20251	Environmental Health	Planeación de un Modelo de Información de la frontera Texas/Mexico	El Colegio de la Frontera Norte, A.C. Dr. Felipe Javier Uribe Salas Tel. (878) 782 7207 Texas A&M HSC Dr. Gerry Carrillo Phone: 956.668.6371 gcarrillo@tamhsc.edu	Piedras Negras Piedras Negras	COAH COAH	BD MC BD MC	5/15/2014 18 months 5/15/2014 18 months	$ $ $ $	19,140.15 19,140.15 15,958.30 15,958.30	**Project Status:** The project concluded on April 2016. Some of the project significant contributions are: a) Identification of agencies who manage health information in the region. b) Organization of a working group to discuss the information on environment and health, among: TCEQ, COLEF, SEMA Coahuila, Texas A&M McAllen Campus. c) MOU agreement between Colef and SEMA Coahuila to share health information and define health indicators. d) Diagnostic report with the identification of sources of environmental information with health associated diseases.

10	20270	Environmental Health	McAllen-Mission-Pharr/Reynosa Hazards in Transportation Binational Training and Exercise	City of McAllen Juan Gloria (956)681-2540 jgloria@mcallen.net	McAllen	TX	BD	4/24/2015	$ 45,455.00	**Project Status:** The Project concluded on December 2015. Some of the project significant contributions were: * Update of the Regional Sister City Plan e-directory * Training on HAZMAT response on International border crossing on Sept. 2015.
							MC	5 months	$ 45,455.00	

	$	396,688.07
	$	396,598.07
Total Approved	$	648,514.43
Total Disbursed	$	605,348.43

Updated March 31, 2018

THREE STATE (TX-CH-NM) BORDER 2020 - 2017 PROJECTS											
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer / Contact Information	Project Location	State	PM	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1		**2**	Collaborative K12 capacity building and research for air quality monitoring	Center for Environmental Resource Management and Geological Sciences Department, -University of Texas at El Paso Stanley Mubako stmubako@utep.edu			SV/AQ	3/12/2018	$ 65,000.00	**Project status:** Project had its kickoff meeting on March and will be presented on the next JAC meeting to be held on May. Initial designing work is being done.
									$ 65,000.00 $ -	

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2013 PROJECTS											
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer / Contact Information	Project Location	State	PM	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
2	2		Mitigating Localized Flooding - Development of a Green Infrastructure Master Plan, Mercedes, TX.	City of Mercedes Daniel Tijerina dtijerina@cityofmercedes.com	Mercedes	TX	JH/AQ		$30,000.00	**Project Status:**
1		**3**	Waste Separation Stations, Matamoros, TAMPS.	Presidencia Municipal H. Matamoros, Tamaulipas Dirección de Control Ambiental Eduardo Jorge Castilla e_castilla1974@hotmail.com	Matamoros	TAMPS	JH/AQ		$ 12,352.00	**Project status:**
									$42,352.00	
									$ -	

Updated March 31, 2018

Total Approved	$	107,352.00
Total Disbursed	$	-

BORDER 2020: UNITED STATES - MEXICO ENVIRONMENTAL PROGRAM

BORDER 2020
FRONTERA 2020

HIGHLIGHTS REPORT AUTUMN 2018

EPA
United States Environmental Protection Agency

SEMARNAT
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

Cover photo:
Chisos Mountains, Texas
Photographic Archives
National Commission for Protected Natural Areas of México (CONANP)

ED_002319B_00013657-00002

MESSAGE FROM THE NATIONAL COORDINATORS

The Border 2020 Program continues to provide a strong and dynamic basis for our binational partnership providing solutions to environmental and public health challenges in the border region. Collaboration is key to achieving successful, sustainable and long-term results. As National Coordinators, we are committed to working together to advance the mission of the Border 2020 Program: to protect the environment and public health along the United States-Mexico border region.

Our collaborative efforts with the U.S. Border Tribes and United States and Mexican federal, state, and local governments have proven to benefit our shared environment and residents on both sides of the border. We have built partnerships and invested our resources into projects that address topics such as air quality, water quality, wastewater treatment, solid waste management, emergency response, and environmental stewardship.

This report highlights the accomplishments of the Border 2020 Program during the last two years. We present 22 projects that have been implemented and show the progress of our efforts to improve conditions for border communities and our shared environment. Through these projects, we have also been able to perform studies or apply best management practices to achieve successful outcomes of the Program's goals.

Reaffirming our commitment to the Border 2020 Program, we, as National Coordinators, support our partners including government at all levels, U.S. Border Tribes and Mexican indigenous communities. We would like to take this opportunity to express our gratitude to the devoted individuals, communities and organizations that support and participate in Program activities to improve environmental and public health conditions along the border region. We recognize the importance and value of our partners' dedication, commitment, and contribution to the success of the Program.

The United States-México environmental cooperation in our border region is without a doubt a success story and sets an example to the world, which is certainly worth to keep building upon. We welcome you to reflect on our recent accomplishments and ask that you continue to support and engage in finding solutions to the challenges that still exist in the border region.

Thank you!

Jane Nishida
National Coordinator
United States of America

Enrique Lendo
National Coordinator
México

ED_002319B_00013657-00003

INTRODUCTION

Reaffirming our commitment, 2017-2018

The United States-Mexico border is a dynamic and unique geographic region facing many environmental challenges including poor air quality, unsafe drinking water and wastewater treatment, and inadequate waste management programs and services. The border is home to over 15 million people where approximately 90% of the population resides in cities, while the remaining population is found in small towns or rural communities. The **Border 2020 Program** is the latest United States-Mexico environmental program implemented under the 1983 La Paz Agreement, focusing on communities 62 miles on either side of the 2000-mile border. The Border 2020 Program encompasses a regional, bottom-up approach for decision making, priority setting, and project implementation to address the environmental and public health challenges in the border region.

The Program is designed to draw from communities and local stakeholders, as well as work directly with federal, state, tribal and international partners to implement environmental projects and solutions. Specifically, the framework goals focus on improving air and water quality, promoting clean land, strengthening preparedness and response, fostering environmental stewardship and advocating for environmental health initiatives along the border. This Accomplishments Report shares a snap shot of our Program successes in the last couple of years (2016-2018) to improve the quality of life and enhance our shared environment.

For more information on the details of the goals and objectives of the Border 2020 Program, we invite you to read the Border 2020 Framework Document or if you are interested to know more accomplishments of the Program, please visit its homepage at EPA and/or SEMARNAT internet sites to see past reports and other information of interest.

ED_002319B_00013657-00004

IMPROVING AIR QUALITY

Poor air quality can have significant community economic and social impacts, including increased illness, premature death, and lower quality of life. The United States-Mexico border region is vulnerable to the transboundary movement of pollutants, including inhalable particulate matter (soot and dust), ozone (smog), and carbon monoxide. Contributing binational sources include dust from unpaved roads and open areas, smoke from illicit burning of trash and tires, and mobile sources such as heavy freight vehicles, private owned cars, and trucks idling at border crossings. The Border 2020 Program has supported improving air quality by expanding monitoring networks with increased data access, improvement of air quality through State Implementation Plans (U.S. and Mexico) and indoor air quality educational programs.

Energy Efficiency Workshop in Tamaulipas

Participants of the first training workshop on energy efficiency.

Increasing energy efficiency in Mexico has become a strategy at all levels of government to improve and build long-term sustainability within their public buildings and enhance security of their energy supply while minimizing the impact to the environment. The operation and installations of public lighting systems and the consumption of energy in public buildings represents one of the greatest expenses faced by municipalities, sometimes reaching up to 40% of their costs. This factor limits the ability for local governments to focus on other priorities and efforts. Through a Border 2020 Program grant, the State of Tamaulipas' Ministry of Urban Development and Environment held two training workshops on energy efficiency to 10 border municipalities within the state. The workshops' materials provided information on the basic tools needed to achieve greater energy efficiency in lighting public spaces, thus increasing their economic savings.

The workshops were part of a series of actions to improve energy efficiency in the state, including two energy forums: "First State Energy Forum: Tamaulipas, Energy that moves to Mexico" and the third International Congress on Renewable Energies: "Perspectives of Energy in Mexico." Coinciding with the Border project, the State launched a demonstration wind project, which included the start of operations of four wind turbines with the aim to promote the use of renewable energies within the State. The State also distributed over 10,000 booklets, "Practical Guidelines for Energy Savings," to help raise awareness in communities on the benefits of installing environmentally friendly technologies in their homes. As a result of these workshops, 10 municipalities committed to carrying out an energy audit in their buildings, benefitting 1.7 million residents.

ED_002319B_00013657-00005

Healthy and Resilient Housing in Ciudad Juarez

Low-income families often have limited resources to implement energy and water saving measures in their homes. This is often due to either a lack of knowledge, technical assistance, or financial resources. The lack of access to financing to help meet their economic needs, limits access to clean energy technologies and services. The Mexican not-for-profit Federation of Private Associations of Health and Community Development (*Salud y Desarrollo Comunitario de Ciudad Juarez, A.C.* [FEMAP]), has been operating a Micro-Credit Program in the region for more than 30 years, during which time it has granted more than 40,000 small loans to low-income residents for home improvements.

With the support of the Border 2020 Program, FEMAP developed a project to identify and implement green infrastructure and energy saving elements to low-income families looking to improve their homes within a rapidly growing area of Ciudad Juarez. The project offered technical and financial assistance to 50 homes (over 200 persons) implementing these energy efficient materials and strategies. In coordination with academic, non-profit and private business, the residents had access to technical experts who guided and educated them on green infrastructure elements that could be incorporated and adopted by them, as well as, access to eco-friendly materials.

The project resulted in an energy cost savings of $630 or 11.249 Kw/hr and water savings of 140,000 gallons of water or $500 following improvements to 45 of 50 homes by installing:

- over 250 LED light bulbs.
- 200 windows sealing.
- 50 low-flow shower heads.
- 50 drinking water filters.
- Roof and wall insulations.

In addition to the improvements made directly to their homes, a catalog of eco-materials was developed with the support from the Architecture Program from the Autonomous University of Ciudad Juarez. This catalog includes information on best practices and an evaluation of each of the selected Eco technologies, identifying those that are viable for implementation in marginalized communities with older housing since the existing catalogs are mainly focused on new housing.

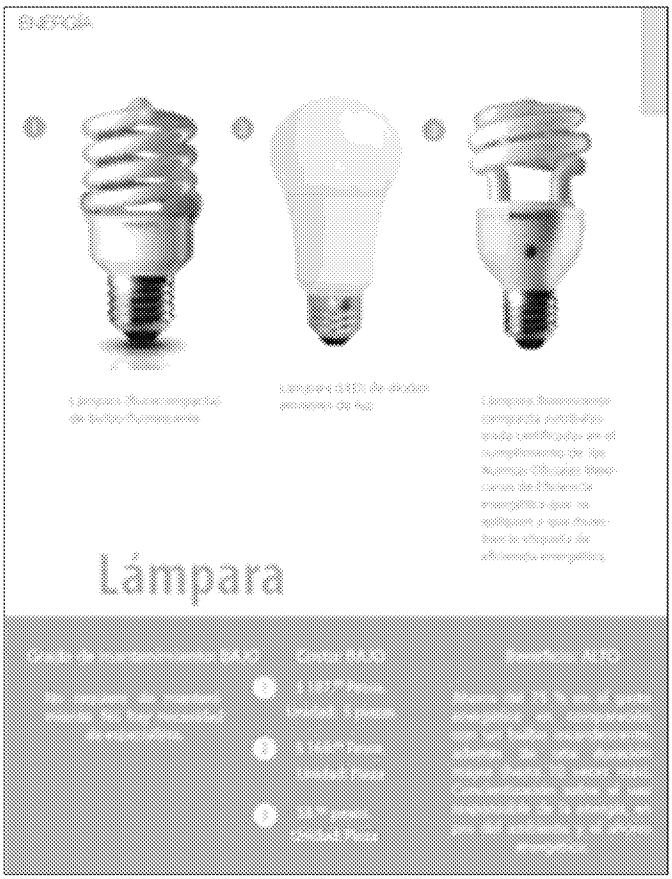


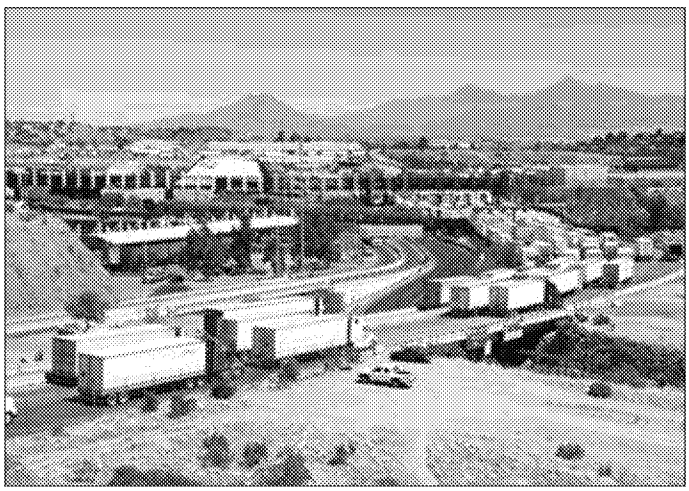
Illustration. Description of types of light bulbs in the catalog.

ED_002319B_00013657-00006

Quantifying Emission Reduction from Reduced Wait Times at Mariposa Port of Entry

The Mariposa Port of Entry (POE) in Nogales, Arizona is an important land port in the United States-Mexico border with over 7 million vehicle crossings per year, including 350,000 truck crossings. The POE is piloting an innovative program to conduct joint inspections with inspectors from both countries in order to reduce commercial truck wait times at the Arizona-Sonora border. This pilot program is expected to significantly reduce wait times, from 8 hours to 1 hour, for northbound cargo trucks. This reduction in wait times will reduce emissions from idling vehicles and accelerate commerce. According to United States regulations Nogales, Arizona, is in non-attainment for PM_{10} and $PM_{2.5}$. These pollutants can cause respiratory and cardiac effects in older adults and young children. The emissions reductions from these mobile sources may improve air quality and public health in the region.

The Border 2020 Program has funded the North American Research Partnership (NARP) to study the amount of emission reduction benefits from this pilot project. Over 400 vehicles were surveyed for information about wait times and vehicle make and model, which allowed researchers to calculate emissions.



Trucks waiting for processing through the Nogales Unified Cargo Facility.

Survey of a truck driver after inspection.

EPA's Motor Vehicle Emissions Simulator (MOVES), a modeling system that estimates emissions for mobile sources at the national, county and project level for criteria air pollutants, is being used by researchers to quantify emission reductions from border wait times. Preliminary data shows that decreased wait times have reduced emissions from idling. In addition, reductions are occurring because vehicles processed through the Unified Cargo Processing Facility tend to be newer and are built with more emission reduction technologies. The NARP is currently working on data analysis of the surveys and emission reduction quantification and the final report will be available in late 2018.

ED_002319B_00013657-00007

Reducing Asthma Triggers for Children through In-home Interventions

The children of Imperial County, California, are living with high concentrations of asthma triggers in the indoor and outdoor environment, including cross border air pollution. These factors have contributed to Imperial County experiencing some of the highest rates of asthma emergency room (ER) visits in California.

To address this issue, the Border 2020 Program has partnered with and funded the Imperial Valley Child Asthma Program (IVCAP) from 2015-2017 to conduct in-home asthma interventions and work with housing maintenance workers on implementing healthy homes strategies. During this period, 94% of participants enrolled in the program reported no ER visits or hospitalizations. In addition, IVCAP reached over 2,000 people through outreach and education, program enrollment, and other community engagement activities.

One of the community events held at Imperial County.

EPA continues to support and positively impact low-income families by funding in-home asthma interventions to IVCAP by a Clean Air Act asthma grant. The 2017 funding has a goal to provide in-home environmental asthma assessments and tools to manage asthma triggers for families and children 17 and under. These home environmental observations will be carried out by *promotoras*, or community health workers.

> *"I enjoy educating parents of asthmatics on what they can do to improve their home environment, such as introducing them to non-toxic cleaning products."*
>
> **Rubi Alvarez**
> **Community Health Worker (*Promotora*)**

To date, IVCAP has enrolled almost 90 additional asthmatics into their program with 80% of them reducing, avoiding, and/or eliminating two or more triggers identified after IVCAP's home environmental assessment. Families received tailored interventions for their unique set of triggers in their homes.

By the end of this 2017-18 effort, IVCAP hopes to reach up to 70 families and to conduct in-home asthma interventions. These interventions will decrease ER visits and hospitalizations. In addition to in-home visits, IVCAP will raise awareness by conducting outreach and educating residents living with asthma on the benefits of improving the indoor home environment to maintain long term control of asthma. For more information on asthma and environmental triggers, please visit EPA's asthma web page.

ED_002319B_00013657-00008

ENHANCING WATER QUALITY

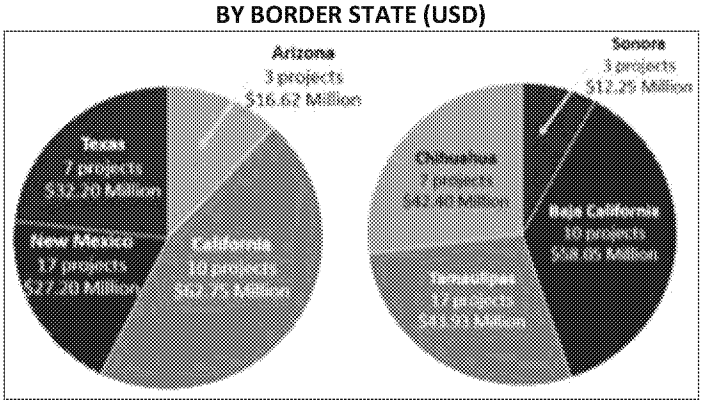
Rivers and watersheds know no boundaries and, in some areas, define the United States-Mexico border. Polluted stormwater and sewage from deteriorated infrastructure and extreme weather events can contaminate transboundary waterways, causing health concerns along the border region. The Border 2020 Program has improved water quality through the financing of stormwater mitigation or management demonstration projects, such as green infrastructure, solid waste reduction programs and research. Funds from the related Border Water Infrastructure Program (BWIP) have been used both to rehabilitate and to build water and wastewater infrastructure.

United States-Mexico Border Water Infrastructure Program

The Environmental Protection Agency's United States-Mexico Border Water Infrastructure Program (BWIP) funds the planning, design, and construction of high priority water and wastewater infrastructure along the border region. BWIP assists disadvantaged communities in identifying and securing available funding sources and addressing funding gaps to ensure access to safe drinking water and adequate sanitation, often for the first time.

BWIP provides hands-on management and technical oversight for communities lacking technical and managerial capacity that can then complete project planning and design requirements, increasing funding opportunities for construction assistance from other programs, such as Texas' Economically Distressed Areas Program, the State Revolving Fund, United States Department of Agriculture's (USDA) Rural Development Water and Environmental Programs, and the North American Development Bank (NADB).

2017 PROJECTS PRIORITIZATION BREAK DOWN BY BORDER STATE (USD)



Rivers along the United States-Mexico border sometimes naturally define the international boundary like the Rio Grande or flow from Mexico into the United States such as the Tijuana River. Projects funded under the BWIP address transboundary sewage discharges between the two countries. Treating raw sewage at the source before it enters shared border water bodies is the most technically feasible and financially viable option to prevent transboundary contamination. As part of this partnership, Mexico matches EPA's project's investments dollar for dollar, which helps protect public health and the environment.

Program Accomplishments

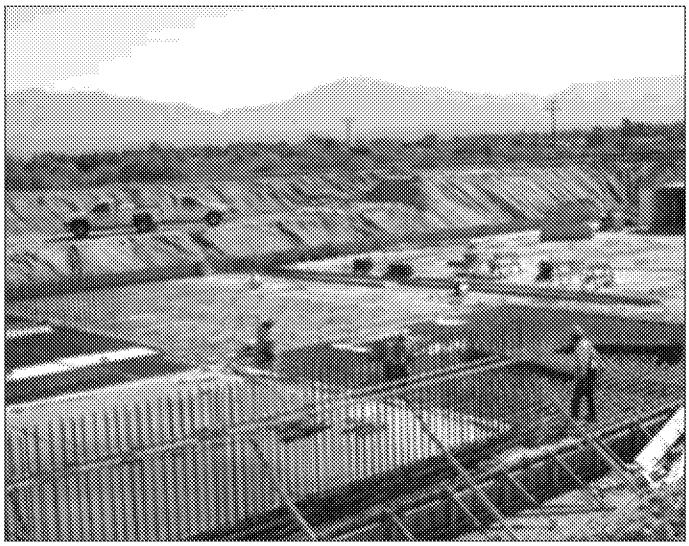
Since 2003, through 108 projects funded, the program has provided access to safe drinking water to 70,000 homes and first-time wastewater collection and treatment to 673,000 homes. In 2017, through the NADB, EPA announced a new project application cycle for BWIP funding. This identified over 60 eligi-

ED_002319B_00013657-00009

ble drinking water and wastewater projects with a total estimated construction cost of $296 million dollars that address public health and environmental conditions along the border.

Building technical and managerial capacity at Sunland Park, New Mexico through partnerships

The construction of a new treatment plant in Sunland Park, a small and disadvantaged community in New Mexico, started in August 2017. Camino Real Regional Utility Authority (CRRUA), the local wastewater utility, struggled with inadequate and aging infrastructure, environmental compliance, and lack of managerial capacity and resources. For close to two years, EPA, New Mexico Environment Department (NMED) and NADB, worked closely with CRRUA to implement a capacity building plan to ensure CRRUA could effectively manage a new wastewater treatment plant. EPA provided more than $816,000 dollars to implement this plan and technical assistance for project planning and design. The plan was successfully implemented; EPA and NMED then funded the construction of a $12.7 million dollars treatment plant. EPA contributed with $9 million and NMED provided the additional $3.7 million in state funding. The treatment plant will improve access to sustainable wastewater treatment services to approximately 6,440 residents of Sunland Park and Santa Teresa and will greatly reduce the risks of untreated or inadequately treated wastewater discharges.



Construction activities for the new Sunland Park treatment plant.

CRRUA's board chair, Josh Orozco, stressed the importance of finally being able to provide adequate wastewater treatment capacity in the community. During the July 2017 groundbreaking ceremony, he said this new plant "…will not only allow more homes and more businesses to be helped, but will also improve the health of our community."

Protecting the Tijuana River Watershed from transboundary contamination

The Tijuana River, originating in Baja California, Mexico, crosses the United States-Mexico border in San Ysidro, California, and empties into the Pacific Ocean just south of Imperial Beach, California. Discharges of raw and poorly treated sewage in Tijuana can impact the economy, health, and environment of United States communities like Imperial Beach and Chula Vista in San Diego County. As part of a multi-stakeholder and long-term effort to address these transboundary spills, a BWIP project is underway to repair some of the deteriorating wastewater collectors. These collectors carry sewage from households to the Tijuana wastewater treatment plant. If these collectors are not repaired, catastrophic collapses could occur, resulting in hundreds of millions of gallons of untreated sewage flowing into the United States and onto San Diego County beaches. The existing partnership between EPA and Mexico's water agencies, provided $7 million dollars for the repair of more than 6 miles of sewage collectors and rehabilitated 30 manholes. A second phase for the construction of 2.5 miles of additional sewage lines is underway. The estimated cost of this project is $3 million dollars with a projected EPA contribution of $1.4 million.

ED_002319B_00013657-00010

Fat, Oil and Grease Public Outreach Campaign in Brownsville

The Brownsville Public Utilities Board (BPUB) was awarded a grant of $25,000 dollars from the Border 2020 Program in February, 2016, to provide outreach and education on the impact of Fat, Oil and Grease (FOG) pollution on water quality to the communities in Brownsville, Texas; and Matamoros, Tamaulipas. Historically, at the BPUB, FOG residential and commercial service calls occurred on average five times a week, with increased occurrences during the month of December.

BPUB entered a voluntary reduction program with the Texas Commission on Environmental Quality (TCEQ), Sanitary Sewer Overflow Initiative. This voluntary program requires BPUB to work on reducing unauthorized discharge of untreated or partially treated wastewater from the collection system or its components (e.g. manhole, lift station, or cleanout) before reaching a wastewater treatment facility as a result of FOG issues. Through educational campaign efforts to both the general public and to commercial establishments, the BPUB aimed to reduce the number of FOG related service calls and bring awareness about the proper disposal techniques in dealing with Fat, Oil and Grease.

Marketing and Education efforts

On March 16, 2016, the BPUB officially kicked-off its "Fat, Oil and Grease" public outreach campaign at its monthly public meeting in Brownsville. During the public meeting, they announced their collaboration with the City of Matamoros on the new FOG outreach program. BPUB reached communities from both sides of the border through a number of activities that included advertisements, educational fliers, ad videos, workshops, and press coverage. Social media platforms such as Facebook, Twitter and YouTube were also utilized to target younger audiences and share the educational video and audio campaigns that were developed. Throughout the project period, over 80 public outreach events and trainings with over 1,700 participants were conducted to the public in apartment and housing complexes, churches and educational institutions, as well as, commercial business.

Public outreach event in Brownsville.

More importantly, the BPUB through its outreach efforts has consistently been reducing the number of FOG service calls from 731 in 2013 to 417 in 2016, a 43% reduction in just four years. During the project period, in 2015 and 2016, the BPUB received 477 and 417 services calls related to FOG pollutants, respectively. Overall, the project met its objectives, including reducing the number of FOG related calls 13% or 60 calls. To continue to learn more about BPUB's FOG efforts please visit its web page.

ED_002319B_00013657-00011

Building Green Infrastructure in the Valle del Sol Avenue Public Space

The World Health Organization (WHO) established a sustainability indicator of 9 m^2 of green area per inhabitant. The border region of El Paso and Ciudad Juarez lacks urban green spaces, especially in Ciudad Juarez where an estimated 4.5 m^2 of green area per inhabitant exist. Since 2013, Ciudad Juarez has actively been partnering with various organizations to increase green infrastructure and expand green spaces throughout the city. These projects not only can be cost-effective but can address flooding issues associated with a lack of storm-water infrastructure and beautify areas that see high pedestrian traffic.

In 2016, the Border 2020 Program helped fund the rehabilitation of a park situated on Valle del Sol Avenue and Solares Street. Located over a half a mile from the border, the park is the only green space in the area available to the community. Over many years, the park had heavily degraded due to a lack of maintenance and no longer served as an area where the community members could gather. The *Instituto Tecnológico de Ciudad Juárez* (ITCJ, by its acronym in Spanish), the promoter of the project, transformed the park back to a usable space for community members, but also addressed flooding issues that this area experienced during rain events.

Passive rainwater harvesting systems at the park.

With funds granted by the Border 2020 Program, the ITCJ developed this project with the following objectives:

- Establish passive rainwater harvesting systems;
- Conserve water used for watering;
- Protect the soil from wind erosion; and
- Incorporate and take advantage of the existing urban infrastructure.

The project began in June 2016 with the cleaning of the site and the reconditioning of the sidewalk, the construction of passive systems for rainwater collection, as well as the recovery and reconfiguration of existing vegetation. The amount of rainfall monitored from July 2016 to November 2017 (17 months) captured a total volume of 472, 502 U.S. gallons of rainwater.

Presently, the passive water collection systems continue to function effectively and the vegetation is thriving. The park is supported almost entirely with rainwater except in cases of extreme water stress or for the initial support of some new plant seedlings.

Thanks to a donation from the municipal authority, the park soil is protected from wind erosion by a walnut shell cover which allows any moisture in the soil to be conserved.

Finally, surveys conducted in the area showed that the social value of the park increased substantially. Before the project, the space was viewed as a negative area within the community and is now seen as a usable social gathering park.

ED_002319B_00013657-00012

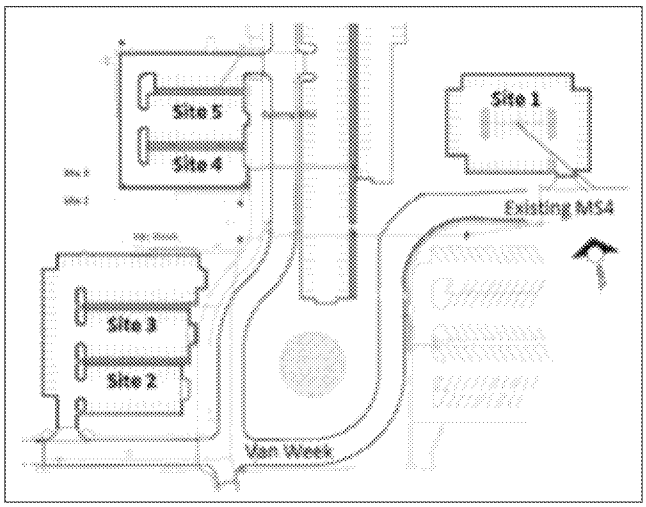
Studying Low Impact Development Methods for South Texas Stormwater Management

A number of communities in the Lower Rio Grande Valley in southern Texas have been evaluating various Low Impact Development (LID) methods to incorporate into their communities. LID provides several advantages over traditional stormwater management practices such as: reducing or eliminating the need for large retention ponds; decreasing pollution to receiving waters; lessening erosion; more visually appealing within the community; flexibility in the layout of projects; and lowering cost. A research team under the direction of Dr. Jungseok Ho, of the University of Texas Rio Grande Valley (UTRGV), evaluated the use of bioswales in parking lots to determine the best performing locally available bioswale porous media material as well as design a standard that could be used by communities in the region. Bioswales are generally designed to manage runoff from large impervious surfaces such as parking lots and incorporate engineered porous soils and/or other landscape elements to remove debris and pollution from surface runoff.

BIOSWALE POROUS MEDIA MATERIALS AND PARKING LOT DRAINAGE SIZE

Sampling Sites	Bioswale	Porous Materials	Drainage Size (acres)
Site 1	No bioswale	No bioswale	.237
Site 2	Bioswale 1	Pumice	.216
Site 3	Bioswale 2	Manufactured sand	.218
Site 4	Bioswale 3	Recycled crushed glass	.209
Site 5	Bioswale 4	Natural Sand	.206

Building on previous studies Dr. Ho conducted, his team evaluated five testing sites that utilized various bioswale porous media (no bioswale, pumice, manufactured sand, recycled crushed glass and natural sand) in parking lots on the UTRGV Edinburg campus.



Parking lots located north of Van Week Street in UTRGV campus.

The project evaluated the hydrological performance of the four different materials used at the five testing sites. Field testing indicated Site 2 with the Pumice material showed the best hydrologic performance taking into account four decision criteria: 1) runoff volume reduction; 2) peak flowrate reduction; 3) peaktime attenuation; and 4) runoff solids filtration. Pumice showed the highest filtration of the materials with 58% and a peaktime attenuation of 64%.

The soil test results show that any mixtures containing pumice more than 40% of the volume produced promising results. Three 40% pumice mixtures (with manufactured sand, natural sand, and recycled crushed glass) achieved 30% of specific retention and 52% of filtration on average.

Overall, based on the field testing, pumice performed the best of the bioswale porous medias, with testing showing that at least 40% pumice material mix is the ideal material for this region. However, it should be noted that further studies need to be conducted to consider the local availability, cost of the material and project construction to determine the overall practicality to be used by the communities.

ED_002319B_00013657-00013

Green Infrastructure for Sediment Control and Flood Protection in Ambos Nogales

The International Outfall Interceptor (IOI) is an aging pipeline that conveys untreated sewage from Nogales, Sonora, and Nogales, Arizona (Ambos Nogales) to the Nogales International Wastewater Treatment Plant nine miles north of the border in Rio Rico, Arizona. Since the wastewater collection system in Sonora acts as a combined sanitary-stormwater conveyance, over the years sediment inflows and infiltration of stormwater in Sonora have caused failure of the IOI in Arizona. Erosion (scouring) from the sediment has weakened the conveyance system resulting in breaks in the IOI, most recently in July 2017, leading to sewage spills into the Nogales Wash. Repeated failure of the IOI could result in contamination of Arizona groundwater resources.

Rain park designed to harvest rainfall and prevent flood events.

The Watershed Management Group (WMG), a Tucson-based non-profit, led a Border 2020 Program funded project to demonstrate the potential of green infrastructure (GI) to diminish the amount of sediment during flood events that is scouring the IOI. Green infrastructure, according to EPA, uses vegetation, soils, and other elements and practices to restore some of the natural processes required to manage water and create healthier urban environments. The project used a three-pronged approach including:

- Capacity building (community trainings in planning, design and implementation activities);
- Demonstration sites (two projects for sediment control); and
- Policy development (resolution to expand and strengthen GI practices in Nogales, Sonora).

Working with local government and residents of Nogales, Sonora, WMG completed two demonstration sites covering close to 10,000 m^2, similar to the area of a large soccer field. In addition, 88 residents attended a training and over 500 community members were informed about green infrastructure concepts via community events and project participation. One demonstration site is a rain park that now harvests a volume of 50,000-70,000 liters of rainfall per rain event. These GI modifications will nearly eliminate the park's contribution to flood events downstream in the Ambos Nogales area.

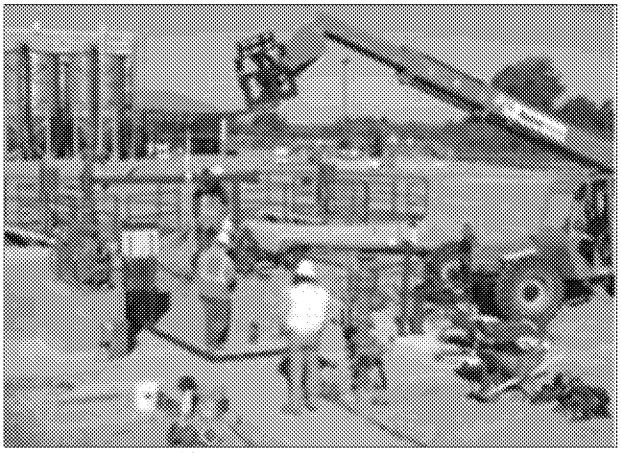
The project attracted support from a Nogales member of the Sonora Congress, who is also on the State of Sonora Commission for Energy, Environment and Climate Change. This project moved beyond the local level, spurring the Sonora Congress to adopt a green infrastructure law in April of 2017, the first of its kind approved in Mexico.

This project increased community capacity to use green infrastructure to reduce flooding in the Ambos Nogales area and prompted the local government to support future green infrastructure development.

ED_002319B_00013657-00014

Protecting the City of Holtville's Water Resources in Imperial County

Located in Imperial County, California, the City of Holtville's wastewater treatment plant (WWTP) was not meeting discharge requirements for ammonia and other pollutants that were flowing into the Pear Drain, which feeds the Alamo River and ultimately the Salton Sea in southern California. Thanks to funding from EPA's Border Water Infrastructure Program and the State of California Clean Water State Revolving Fund, the existing WWTP was upgraded and now provides wastewater service to 100% of the service area or 6,594 residents of Holtville.



Building a stormwater pump station.

Already considered an impaired water body, the polluted discharges from Holtville exacerbated the treacherous conditions faced by wildlife and plant communities living in the Salton Sea. Over the years, water levels in the Salton Sea have dropped rapidly due to evaporation and have increased salinity and pollutant concentrations. The exposed lakebed has succumbed to desert winds that now carry polluted dust onto the surrounding communities. These dust particles may contribute to asthma attacks throughout Imperial Valley. The Holtville WWTP that now meets discharge requirements will not only increase the chances of survival for the various organisms dependent on the sea, but the influx of properly treated water will keep dust from being exposed to the wind and away from vulnerable urban residents.

Some of the new components installed in the Holtville WWTP include an automatic bar screen that maximizes the removal of large objects and an activated sludge system enhancing treatment effectiveness and improving the quality of the effluent. A rehabilitated operations building within the treatment plant was also equipped with modern lab equipment, ensuring that tested effluent meets discharge requirements.

> *"EPA is committed to helping communities across Imperial Valley protect the state's vital water resources. Our investments renew aging infrastructure, which can be costly for smaller communities like Holtville."*
>
> **Tomas Torres**
> **Water Division Director**
> **U.S. EPA Region 9 Office**

ED_002319B_00013657-00015

PROMOTING CLEAN LAND

In the United States-Mexico border region, solid waste management has not kept pace with increasing population, resulting in unmanaged trash and overburdened waste services and infrastructure; as well as potential valuable materials being lost in landfills or illegally dumped. Poorly managed waste contaminates land and water, and adversely impacts public health such as creating fire hazards and contributing to poor air quality or serving as breeding habitats for mosquitos and the potentially spreading of vector-borne diseases such as Zika. Sustainable Materials Management (SMM) promotes a life cycle approach which begins by optimizing design to final production of goods and services to reduce waste, eliminate toxicity, and maximize reuse. The Border 2020 Program partners have advanced SMM through clean-ups and projects to recycle household hazardous waste, electronics and scrap tires.

Supporting Auto Recyclers

Every year vehicles are stockpiled along the United States-Mexico border when they reach the end of their useful lives. Often, these stockpiled vehicles have not been processed properly to recover the reusable or recyclable materials nor dispose of hazardous materials these vehicles have. As the discarded vehicles are piled up, they become an eyesore to the local communities and pose a risk to human health and the environment. The vehicles often contain hazardous materials like antifreeze, used oil, or lead and when abandoned, they become a liability to local governments.

In response to address the needs of auto recyclers in the border region, EPA and SEMARNAT have produced an "End-of-life Vehicle Guide" (Guide). The Guide was created to share effective practices for preparing an end-of-life vehicle so that the vehicle can be recycled properly and contribute to the Border 2020 Program's goal to reduce waste through the safe and responsible recovery of materials.

The Guide and other materials form a packet comprising of the guide, a set of quick reference waste cards, and a poster can be used to inform handling facilities and technicians on prepping the vehicles for processing in an environmentally sound manner. Additionally, the Guide discusses responsible disposal, cost recovery, health, safety and security, industry standards, and a listing of vehicles containing mercury switches.

Specific waste streams that pose a high risk to workers and the environment are highlighted in the Guide and on a set of waste cards complete with diagrams. The waste streams included are: lead, mercury switches, refrigerants, waste batteries, waste fluids and waste fuel. Overall, the Guide provides materials that technicians can use to dispose of old vehicles using environmentally sound management practices.

EPA and SEMARNAT will work together to disseminate the folders to the relevant stakeholders along the border region in fall 2018. Printed copies of the materials are available in Spanish while both English and Spanish versions can be found on EPA's website.

ED_002319B_00013657-00016

Scrap Tires and Solid Waste Management along the United States-Mexico Border

The Border 2020 Program has aimed at building a more sustainable, integrated approach to waste materials management in order to minimize and reduce the impact to the environment and improve public health. However, in a geographic region where population, socio-economic conditions and environmental regulations can vary significantly, different border communities have had to take varying and creative approaches to build sustainable communities.

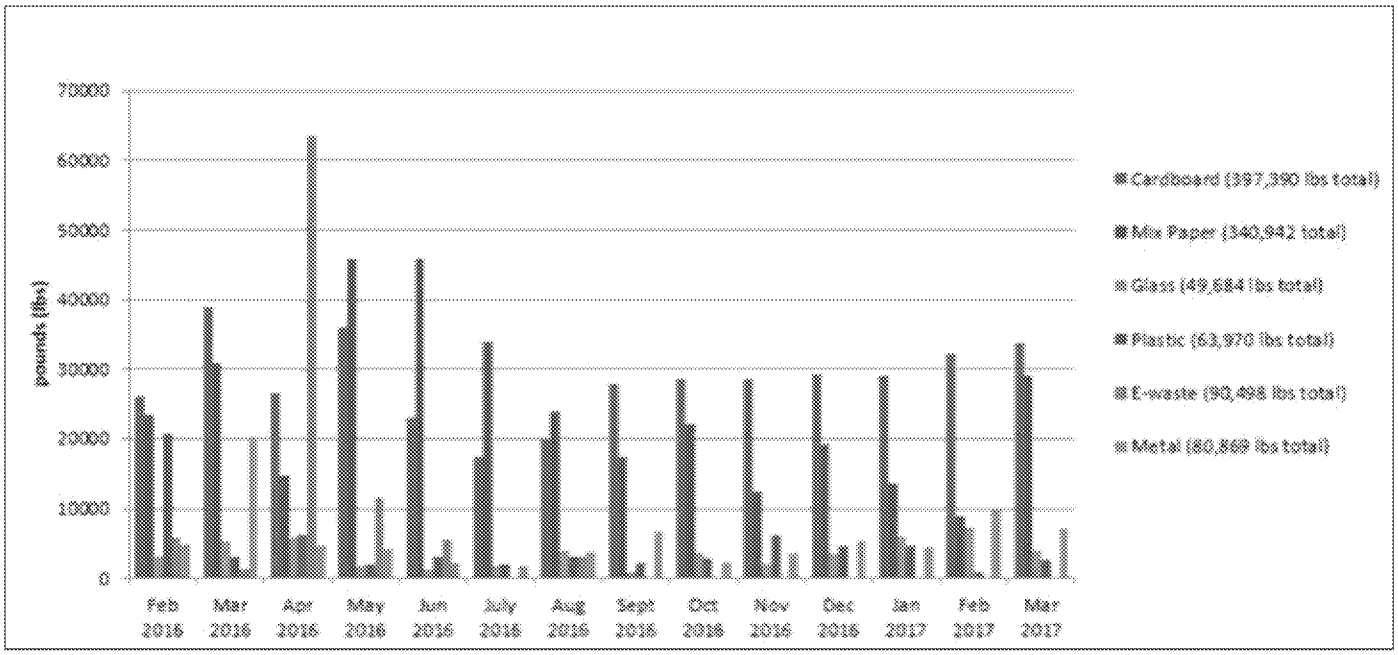
City of Pharr, Texas

Over the years, the city of Pharr has implemented greater sustainability tools within the Public Works Department to make the city one of the cleanest in the Lower Rio Grande Valley. In 2016, Pharr received a Border 2020 Program grant for $36,000 dollars to continue improving their recycling and education efforts within the community to reduce the city's dependency on landfills and build a healthier community. Over a 14-month period, the city collected:

- Over 5,700 scrap tires;
- 60 tons of mixed waste (Figure 1); and
- 1,023,353 lbs. of recycled material diverted from the landfill.

Staff launched a bilingual public education campaign of the city's recycling and sustainability efforts, stormwater pollution and illegal dumping of scrap tires, through social media, brochures, public service announcements and over 100 outreach activities (20 meetings, 40 events, 50 presentations). The project also increased recycling efforts in some Pharr schools by promoting an environmental education contest and providing 75 recycling bins for school classrooms and dozens of 95-gallon recycling bins within the school district. To learn more about Pharr's Public Work Department and their efforts, please visit its web page.

RECYCLABLE MATERIAL COLLECTED AND DIVERTED FROM LANDFILL AT PHARR, TEXAS. (lbs./month)



Valle Hermoso and Rio Bravo, Tamaulipas

In 2014, the state of Tamaulipas passed legislation that outlined its Program for Integrated Waste Management and Prevention. Within this program, based on factors such as population growth and solid waste generated per capita, the state prioritized municipalities where it was vital to establish a municipal integrated waste management and prevention program. It also outlined specific strategies and actions that these municipal plans should address including short, medium and long-term implementation as well as associated costs. The implementation of the municipal plans is done in three phases: conducting a diagnostic of current conditions; adoption by the municipality of their plan; and finally implementation, monitoring and evaluation of the municipal program.

The State Secretariat for Urban Development and Environment in Tamaulipas (*Secretaría de Desarrollo Urbano y Medio Ambiente* [SEDUMA]) received a $20,000 dollars grant from the Border 2020 Program to assist the municipalities of *Valle Hermoso* and *Rio Bravo* complete their diagnostic study on local waste management. The diagnostic study, which took place over a two-month period, looked at:

- Current operations, staff, equipment, solid waste collected and classification of waste;
- Specific strategies recommended to be implemented over a short, medium, long-term period;
- Costs associated with implementation of strategies (Table 1);
- Monitoring program parameters; and
- Potential funding mechanisms.

On August 22, 2016, SEDUMA presented both municipalities with the diagnostic assessment of their current waste management system. In March, 2017, *Valle Hermoso* officially published and registered the diagnostic assessment with the State, moving into the third phase. Next steps include the municipality of Rio Bravo's city council approval of the assessment and registration of the program.

TOTAL COSTS TO IMPLEMENT SHORT, MEDIUM AND LONG TERM STRATEGIES IN *VALLE HERMOSO* AND *RIO BRAVO*, TAMAULIPAS.

Strategy Considered for Municipality	Total Cost for Municipality to implement over short, medium and long term (USD)	
	Rio Bravo	Valle Hermoso
Management/Operations	$4,776,923.00	$1,296,428.00
Recycling	$1,648.00	Not Considered / Not Applicable for Community
General Services	Not Considered / Not Applicable for Community	$10,989.00
Public Outreach & Education	$16,373.63	$17,032.00
Private Industry Participation/ Partnerships	No cost to municipality	Not Considered / Not Applicable for Community
Institutional Building Capacity	$155,495.00	$122,527.00
Finance/Legislative	No cost to municipality	Not Considered / Not Applicable for Community

ED_002319B_00013657-00018

Addressing the Binational Challenges of Electronic Waste in Texas and Coahuila

Rapid advancements in technology and the use of electronics by consumers mean that electronic products quickly become obsolete and are disposed. Unlike other recyclable materials, electronic waste (e-waste) is not as easily recyclable due to the toxic metals (lead, mercury, cadmium and arsenic) found in them. The challenge with recycling e-waste is often improper disposal in local landfills and the lack of infrastructure in communities to properly support handling and recycling.

In 2016, through two Border 2020 Program grants, one to the Secretary of Environment of the State of Coahuila (*Secretaría de Medio Ambiente* [SEMA]) and the other to Green Tec-osos, an environmental group within the Technological Institute of Piedras Negras (*Instituto Tecnológico de Piedras Negras*), e-waste recycling projects were launched in the communities of Ciudad Acuña, Piedras Negras and Guerrero, in the state of Coahuila and Eagle Pass, Texas. These projects aimed to prevent the e-waste generated in the municipalities from being illegally dumped in the Rio Grande riverbed, around the Amistad Dam, as well as in streams, vacant lots and sanitary landfills of the region. They also informed and educated the community about the benefits of reusing electronic products.

COLLECTION COMMUNITY EVENTS AT TEXAS AND COAHUILA FEBRUARY, 2016 - MARCH, 2017

Type of Location	E-waste Collected (tons)	Residents Served
22 neighborhoods of Piedras Negras	32.22	45,000-50,000
Schools from Piedras Negras and Nava del Estado municipalities	8.83	5,500
Businesses and others	5.56	2,500
Eagle Pass	14.83	28,765

Permanent collection center in the facilities of the Public Works Department of Eagle Pass, Texas.

To improve sustainable practices, 10 permanent e-waste collection centers were established among the four communities. Through community events, the projects yielded the collection of over 113 tons of e-waste. In addition, with the assistance of over 60 partners through workshops, trainings and media outlets, residents were educated on the positive impacts of recycling electronic waste has on the environment.

ED_002319B_00013657-00019

Campo Band Advances Zero Waste Practices

In the border region, unmanaged trash causes potential transboundary impacts such as impairing water quality, clogging streamflow, and creating habitat for disease vectors. In 2015, the Campo Band Tribe, located in California, raised concerns about transboundary solid waste issues to representatives implementing the Border 2020: U.S.-Mexico Environmental Program. In 2016, the Program provided funds to conduct a solid waste assessment and prepare a zero-waste plan. The zero-waste plan lays the foundation for developing a zero-waste program, setting a goal to significantly reduce waste and establish diversion practices to eventually eliminate waste sent to the landfill.

The zero-waste plan was completed in January 2018. Along with the recommendations in this plan, the Campo Band is actively exploring other materials management activities including short and long-term goals to develop a self-sustaining waste and recycling program and transfer station. This plan was an important first-step/tool for the Tribe to accomplish their solid waste goals and improve the Tribe's and border region's health. The Campo Band continues to leverage other resources such as EPA's General Assistance Program (GAP) to address their solid waste goals, creating practices that makes sense for their community, and using the zero-waste plan as a valuable tool to accomplish their needs. The Campo Band Tribe is estimated to be funded by GAP for $18,000 USD for the Fiscal Year 2019 to continue to move forward with the zero-waste plan.

Campo Band Tribe members sorting and identifying types of waste.

Campo Band Tribe members weighing types of waste.

ED_002319B_00013657-00020

Composting Diverts Valuable Organic Materials from Landfills

Compost donated to Ecoparque program participants.

Compost is a valuable resource made from food waste, landscape cuttings or other organic material. However, based on the 2018 study "Characterization and Management of Organic Waste" released by the Commission on Environmental Cooperation (CEC), organics in the United States and Mexico are predominantly sent to landfills. The Border 2020 Program has worked to increase diversion rates, estimated to be 32% for the United States and 7% for Mexico, by working with government, academic, non-profits, and industry stakeholders to improve the management of organic waste through compost practices and EPA's food recovery hierarchy practices.

In 2012, the Border 2020 Program awarded the organization "*Tijuana Calidad de Vida*" a grant resulting in the first border municipal landscape compost pilot program that produces compost and educates future composters. In 2016, EPA Region 9's Environmental Finance Center funded a grant to identify compost niche markets in Tijuana for businesses needing to achieve waste reduction goals for their corporate social responsibility ratings. In 2017, the *Colegio de la Frontera Norte* (COLEF, by its acronym in Spanish) conducted a pilot program working with nearly 120 households in Tijuana and training them in a total of 27 workshops. This resulted in the diversion of 10,067 kg of household food scraps. The compost created was used at *Ecoparque*, a campus program to model and teach sustainable practices and 107 sacks of compost were donated to household participants. The findings of these grants were included in the CEC's 2018 report.

On June 13, 2018, the University of Arizona (UA) Compost Cats celebrated the award of a $91,000 dollars grant from the Border 2020 Program to establish the Santa Cruz County (SCC) Compost Center, a much-needed alternative to landfilling waste produce. Nearly 3,000,000 tons of produce crosses the nearby Mariposa-Nogales Port of Entry, one of the busiest land crossings along the U.S.-Mexico border, bound for markets across the United States each year. About 8,000 tons of waste produce are generated yearly, equivalent to two dump trucks per day for an entire year, and is then disposed of in the Rio Rico Landfill, so the new SCC compost center is expected to offer both environmental and economic benefits to the region (Press release for compost-center). In its first year, SCC Compost Center will compost 3,000 tons of waste produce, creating 9,000 cubic yards of compost. This is equivalent to 4.3 football fields covered with one foot of compost. The goal is to compost the 8,000 tons produced annually.

The SCC Compost Center will be modeled after the successful UA Compost Cats program in Tucson, which not only composts but works with local food banks to divert good food from campus to hungry people. In 2015, their work was acknowledged with EPA's "Food Recovery Challenge" award for reducing food waste on the UA main campus and in the City of Tucson. Similarly, the SCC Compost Center will serve as an agricultural learning center for high school and college students and recover this valuable resource from taking up space in the landfill.

ED_002319B_00013657-00021

STRENGTHENING EMERGENCY PREPAREDNESS AND RESPONSE

Recognizing that chemical hazardous events and other environmental emergencies, regardless of an international border, can threaten both local and binational communities, the United States and México continue to work together to enhance preparedness and response for international emergencies. The Border 2020 Program and partners support binational training, exercises, essential equipment and emergency plan updates, which have increased communication and response capability. Together, we have reduced the magnitude of incidents and enhanced safety in the border region.

Binational Training Reduces Danger and Impacts to Border Communities

The Border 2020 Program had allowed to strengthen the cooperation between federal, state and local agencies on both sides of the border to provide exercises and training as well as to ensure that first responders have proper personal protective gear to respond safely and effectively. Since its inception, over 10,500 firefighters, emergency management officials, police, military, industry representatives, medical staff and other relevant community leaders have received training through: 153 training courses, 32 binational exercises and 245 drill notifications between the U.S. and Mexico throughout the Arizona-Sonora and California-Baja California border region.

Firefighters from both countries responding to the December fire.

> *"Thanks to EPA, as well as the firefighters of the city of Douglas, Arizona, who have participated as instructors to enrich our HAZMAT knowledge. With this we are prepared for any emergency. Our aim is to protect the communities in our sister cities. Thanks to EPA for providing us with the equipment since, due to its high cost, it is out of our reach. Thanks for trusting and believing in the firefighters of Agua Prieta."*
>
> **Lieutenant Jose Romero**
> **H. Fire Department of Agua Prieta**

Getting equipment and personnel in a timely manner across an international border crossing to help respond to fires has always been a challenge. It requires a coordinated effort among a wide range of agencies and organizations. Binational training and exercises with first responders, customs officials, other government agencies, military, industry and the public have laid the groundwork for efficient responses in real-life emergencies.

Binational Fire Response in Winter 2017

When a major tire fire sent dangerous billows of smoke from Agua Prieta, Sonora, into Douglas, Arizona, in December 2017; Douglas firefighters crossed the border and helped put

ED_002319B_00013657-00022

Participants in the HAZMAT Tech training.

it out in four hours. Binational training and tabletop exercises conducted four months prior to the fire greatly assisted in increasing the efficiency of the response and reducing the scale and impact of the incident. Additionally, border patrol at the port of entry on both sides provided timely crossings to the binational firefighters.

The binational collaboration with the addition of the Douglas firefighters prevented the fire from growing larger and potentially crossing into the U.S. and reduced the amount of smoke that can cause respiratory problems for sensitive populations such as children, elders and those with asthma along the border.

Training Tested by a Tire Fire

A 200-hour HAZMAT Tech training for Douglas and Agua Prieta firefighters has been ongoing on weekends and will finish up by Fall 2018. As a result of this training, the Fire Department of Douglas will have additional HAZMAT techs and the Fire Department of Agua Prieta will have its first full HAZMAT Tech team. This firefighters will be better trained and equipped to respond to incidents and assist each other in cross border emergencies.

On May 26th, 2018, the training course was interrupted and postponed due to a binational response to a tire fire in Agua Prieta. The recently updated Sister City Contingency Plan was activated and utilized for the response where the Douglas Fire Department assisted in getting the fire under control in under three hours.

Gerardo Romo, a firefighter of the Douglas Fire Department, commented: "Thanks to the binational efforts and the HAZMAT class being presented to Agua Prieta Firefighters, they have been able to respond to incidents in a more prompt and efficient way. In the past, Agua Prieta Fire Department had willingly attended to fire emergencies and showed their best efforts; however, now that they are receiving the HAZMAT training by Douglas Fire Department, they understand the need of proper personal protective equipment to respond and face the risk of each event such as the tire fires. I personally saw the firefighters using the proper respiratory protection equipment during the tire fire that occurred on May 26th".

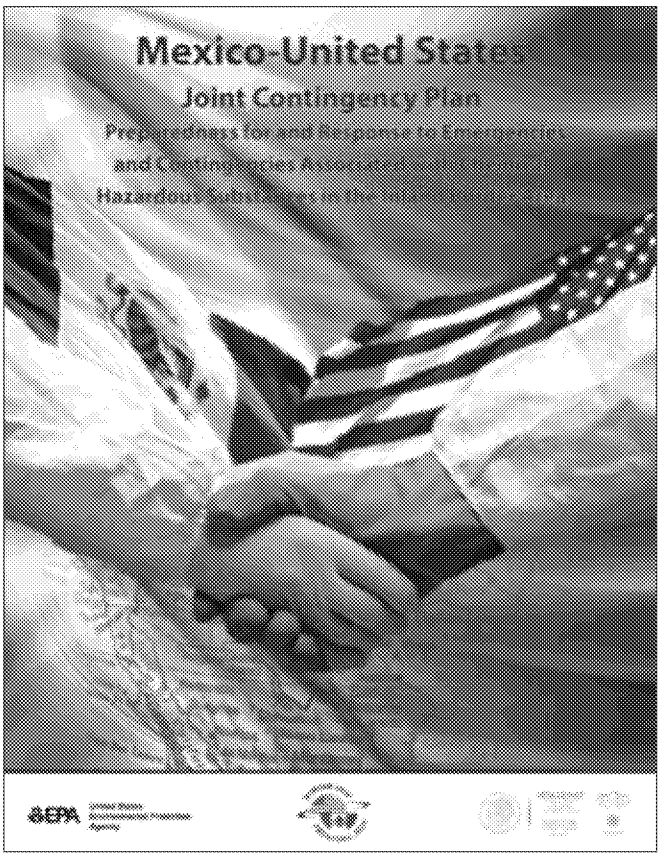
ED_002319B_00013657-00023

Enhance Joint Preparedness for Environmental Response under the Border 2020 Program

Chemical and other hazardous substances emergencies do not respect international boundaries, so maintaining an adequate preparation for a possible emergency in the border region is essential to improve the ability to respond to incidents and protect the environment and public from hazards that could result in serious environmental and health impacts.

Annex II of the 1983 La Paz Agreement established the United States-Mexico Joint Contingency Plan (JCP). The JCP provides a binational coordination mechanism for protecting human health and the environment and responding to significant chemical and oil contingencies or emergencies that affect the inland border area between both countries. Two previous versions of the JCP have been revised and updated. Most recently, on November 17, 2017, in Mexico City, the most up-to-date version of the JCP was signed by the Secretariat of Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales* [SEMARNAT]), through the Office of the Federal Deputy Attorney of Industrial Inspection (*Procuraduría Federal de Protección al Ambiente* [PROFEPA]) and the National Coordination for Civil Protection within the Secretariat of Interior (*Secretaría de Gobernación* [SEGOB]). Previously, for the United States, EPA's Office of Emergency Management (OEM) signed the updated JCP.

The updated JCP has a robust binational notification system that has been restructured to reflect lessons learned from actual emergencies and notification drills. The changes to the notification system were coordinated with the U.S. National Response Center (NRC), Mexico's National Communications Center / National System of Civil Protection (*Centro Nacional de Comunicaciones / Sistema Nacional de Protección Civil* [CENACOM]) and PROFEPA as well as with EPA's Regional Offices 6 and 9. Extensive reviews were conducted by EPA's Office of General Counsel regulation experts, the International Law office and the Office of International and Tribal Affairs, in addition to the Department of State.



Cover of the Joint Contingency Plan.

The ability to plan and prepare binationally improves the probability of adequately responding to incidents and protecting the environment and public from exposure to harmful contaminants and possible serious environmental or health impacts. This binational partnership is also increasing emergency response capacity through training events designed to enhance cooperation, strengthen binational contingency plans at the local, tribal, state, regional and national levels to reduce the risks of emergencies and disasters throughout the border region.

ED_002319B_00013657-00024

FOSTERING ENVIRONMENTAL STEWARDSHIP

The United States-Mexico Border is a vibrant economic region with daily cross-border movement of a myriad of consumer goods and hazardous materials destined for recycling or disposal. When mismanaged, the hazardous materials pose an immediate transboundary environmental health threat. In response, federal, state, and local entities are partnering to conduct north and south-bound surveillance, provide cross-border compliance assistance, and improve access to information about potential industry sources of toxic substances through trainings and workshops. These actions increase transboundary compliance, foster environmental stewardship, and reduce overall risks posed by hazardous waste and materials.

Legislative Reform and Environmental Education in Nuevo Laredo

The Autonomous University of Tamaulipas (UAT, by its acronym in Spanish) received a Border 2020 Program grant to continue educating border communities on the environmental challenges (i.e. water pollution, urban solid waste, fats-oils-grease) that persist in this geographic region. The project focused on the following objectives:

Web page of the UAT with the documents of the generic environmental regulations that can be adapted by the municipalities of the states of Tamaulipas and Nuevo León.

- Educate school students and environmental municipal inspectors about the most common environmental challenges in the region.
- Update the municipal environmental legislation for environmental protection in Nuevo Laredo and some of the surrounding municipalities and present it to the city for adoption.
- Create an online database with the existing environmental regulations or ordinances of all the municipalities within Tamaulipas' border region.

The project resulted in environmental conservation training to over 2,300 students, 50 public school directors, and 20 environmental inspectors of the city of Nuevo Laredo. Additionally, the project aided in the development and delivery to municipal authorities a proposed new ordinance of "Territorial Ecological Planning" of the Municipality of Nuevo Laredo, Tamaulipas. Lastly, the municipalities of Ciudad Mier, Camargo, Jiménez and Jaumave in Tamaulipas adopted environmental ordinances that will benefit approximately 300,000 residents.

ED_002319B_00013657-00025

Port of Entry Inspectors Safeguarding Communities

Enforcing the Resource Conservation and Recovery Act's (RCRA) import/export regulations protects public health and the environment by providing safeguards against hazardous waste and materials being mishandled and spilled. It also reduces the amount of binational "scam" businesses who implement illegal practices, creating unfair business competition. EPA funds California's Department of Toxic Substances (DTSC), a Border 2020 partner, to safeguard the California-Mexico border.

DTSC and San Diego County inspectors work closely with Customs and Border Patrol (CBP) to conduct surveillance and enforce compliance to ensure hazardous materials and waste products are safely transported across the Ports of Entry (POE) and onward to their final destination between the United States and Mexico. These HAZMAT trained inspectors work with U.S. Customs HAZMAT inspectors and serve as part of the emergency response team, a first line of defense in the event of a hazardous spill or accident at the POE. DTSC and the San Diego County, upon request from CBP, also participate in special operations such as inspections of cargo outside of days and hours allowed for hazardous materials. To increase compliance, the two countries provide compliance assistance outreach and training to facilitate both countries industries to understand regulatory requirements.

On June 20, 2018, with funding from the Border 2020 Program and RCRA program, DTSC hosted an import/export workshop in Tijuana, Baja California, in coordination with SEMARNAT, PROFEPA, and Baja California's Secretariat of Environmental Protection (SPA, by its acronym in Spanish), for Mexican hazardous waste and special waste industrial generators operating in Baja California. The workshop focused on import/export requirements including: transport, new electronic manifest system and verification, defining hazardous waste and materials, and differences between federal and state requirements. Nearly 200 people representing industry, government, and academia attended, demonstrating the demand for this type of information and industry willingness to comply.

Attendees of the import/export workshop held in Tijuana.

Based on the last report of the United States-Mexico Consultative Mechanism, 33 Mexican businesses are permitted by SEMARNAT to treat, store or dispose hazardous waste generated by the hundreds of businesses in the region. Offering these hazardous waste compliance workshops in Tijuana assists industry and informs key stakeholders on compliance requirements for United States regulations, ultimately protecting public health and the environment.

ED_002319B_00013657-00026

ADVOCATING ENVIRONMENTAL HEALTH

Environmental health focuses on how the natural and built environment affect human health and how it can be managed to improve quality of life. Our most vulnerable populations such as children, the elderly and those with respiratory issues are often the most impacted by the combination of poor indoor and outdoor air quality, contaminated water, unmanaged waste and other environmental conditions. The Border 2020 Program and its partners have supported binational environmental health conferences, train-the-trainer activities for promotoras (community health workers), interactive mapping applications to identify environmental challenges and implement solutions and other key media strategies to improve public health along the United States-Mexico border.

Teaming up to Address *Zika* disease in Brownsville

In 2016, the *Zika* outbreak in the continental United States emerged as a significant threat to the public. In November of that year, the City of Brownsville, Texas, reported the first case of the *Zika* virus transmitted by a mosquito within the state. The City worked with the Center for Disease Control (CDC), the Texas Department of State Health Services (TDSHS), Cameron County and Brownsville's Health Departments to learn more about the transmission and precautions for the public to take.

In 2017, EPA partnered with the City of Brownsville Health Department to identify hotspots and the factors that led to the spread of the *aedes aegypti* mosquito. The project took a holistic approach to identify the underlying conditions that allow mosquito breeding and how to prevent it. The project mapped the risk areas within the city by looking at existing environmental data coupled with socioeconomic and mosquito data. To date, the city is using a crowdsource application platform in which residents can report potential mosquito breeding sites and upload georeferenced photos. The website also provides recommended actions that residents can take to combat mosquito risk.

The City of Brownsville Health Department is also working with *promotoras*, who serve as public community liaisons, to educate residents through a train-the-trainer model. The project is ongoing and researchers at EPA have presented their initial findings at a conference and recently published a literature review.

> *"We combined environmental data (land cover, precipitation, and temperature) with socioeconomic and mosquito activity data in order to paint a more accurate picture of risk. To our knowledge, this is the first vector mitigation study to take into account both 1x1 meter land cover data and socioeconomic determinants."*
>
> **Pai-Yei Whung, Ph.D.**
> **Project's lead and EPA senior scientist**

ED_002319B_00013657-00027

EPA Engages Communities to Target Children's Environmental Health

Jacobo Sandoval at one community outreach event in Nogales, Arizona.

> *"Families in Nogales, Arizona, are very happy with the healthy homes evaluation and especially with the smoke alarms installed by Sonora Environmental Research Institute, Inc. (SERI) staff. Many families mentioned that Nogales does not have many children's environmental health programs available to low-income families, and they are grateful for this opportunity to participate in the program."*
>
> **Jacobo Sandoval**
> **SERI Program Manager**

According to the World Health Organization, in 2012 it was estimated that 1.7 million children under the age of five died due to environmental factors. Children living along the United States-Mexico border are particularly vulnerable due to the region having higher than the United States national average rates for children living in poverty, being uninsured, and having chronic diseases (Pan American Health Organization, 2014).

Over the past several years, partnerships between EPA's Office of Children's Environmental Health, the Border 2020 Program, the United States-Mexico Border Health Commission under the U.S. Department of Health and Human Services and local organizations, have worked on collaborative projects to identify environmental

ED_002319B_00013657-00028

health needs and provide opportunities for local action to improve the lives of children living along the border. These opportunities have included three children's health symposiums from south Texas to California, as well as federal grants to educate families, community health workers, educators and medical professionals on how to address children's health needs.

In 2018, EPA awarded more than $214,000 dollars to fund five projects aimed at addressing children's environmental health in border communities in Texas, New Mexico and Arizona. These five projects addressed environmental health issues related to lead-based paint, indoor air quality, and integrated pest management.

Many of these projects are establishing new ways of improving current environmental health programs and initiatives for agencies who work within communities located in the border region. These projects will train nearly 350 specialists, including community health workers, childcare givers and medical providers, and reach over 2,000 community members on environmental health topics such as improving indoor air quality, reducing lead-based paint exposure and implementing integrated pest management strategies. Through these projects, and continued leadership from border communities, children's environmental health will continue to improve.

"Chronic diseases such as asthma, cardiovascular diseases, and diabetes are linked to air pollution. We will provide education on a variety of environmental hazards to Promotoras, parents at elementary and middle schools, and pregnant women. The education will provide participants the knowledge needed to identify indoor and outdoor pollutants, harmful chemicals in pesticides used at home, and how they can change or control them without exposing their children to the damaging effects."

Genny Carrillo, M.D.
Texas A&M University
School of Public Health

"Mariposa Community Health Center is excited to have been awarded this funding. Protecting our children by ensuring a healthy living environment is essential to their long-term health and well-being. These funds will provide education to Community Health Workers along the U.S.-Mexico border to assist them in identifying environmental pollutants and train parents and caregivers in appropriate methods to reduce or eliminate exposure within their homes."

Ed Sicurello
CEO, Mariposa Community Health Center

"The Southwest Center for Pediatric Environmental Health is very pleased to hear that we have been awarded this grant. It will serve to augment outreach to disadvantaged children on the border from El Paso to Brownsville. Based at Texas Tech University Health Sciences Center in El Paso, we have partnered with colleagues from the University of Texas Rio Grande Valley School of Medicine to extend our reach. The funds will go to production of training guides for Promotoras, as well as two Promotora workshops. It will likewise support the development of e-learning modules to be used in their new senior medical student elective on pediatric environmental health."

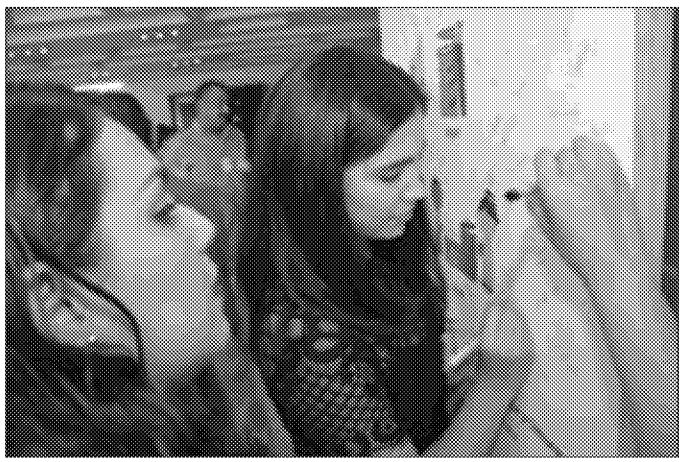
Director Stephen Borron, M.D.
Southwest Center for Pediatric
Environmental Health

ED_002319B_00013657-00029

Responding to *Zika* Threat Along the Border

Besides the shared environment between the United States and Mexico along the border, the Border 2020 Program also recognizes that, "[t]he movement of people and products between the two countries creates a unique binational environment for preventing and controlling diseases spread through food and water, from insects or animals, and between people" (Center for Disease Control, 2018). In response to these risks, the Border 2020 Program has supported efforts to increase awareness and provide training on the use of integrated pest management to prevent the spread of vector-borne diseases, like *Zika* transmitted by mosquitos.

In Fall 2016, two binational environmental health conferences on vector-borne diseases were held in Mexicali, Baja California, and Nogales, Sonora. Partners included: the Autonomous University of Baja California (UABC, by its acronym in Spanish), the Technical Institute of Nogales (ITN, by its acronym in Spanish), *El Colegio de la Frontera Norte* (COLEF), the Center for Disease Control (CDC) and their Mexican counterpart, the National Center for Preventive Programs and Disease Control (CENAPRECE, by its acronym in Spanish), among others.



Participants commit to addressing sources of vectors by keeping their homes and environment clean and free of trash and standing water.

Over 360+ people attended, such as medical students, faculty, health practitioners, government officials, and 30 vector borne disease experts. Key topics included preventive measures to combat *Zika* and other vector-borne diseases, integrated pest management strategies, and the appropriate usage of insect repellants.

In 2017, to confirm long-term impact of the events, the venue hosts (UABC and ITN) contacted the attendees and learned three key findings:

- After the symposia, three out of four respondents shared the environmental and public health information they learned with people they knew.
- In addition, more than half of all respondents reported they now read the label prior to using insect repellents.
- Of critical importance, nearly half of attendees have started pouring standing water out of flower pots to eliminate mosquitos' eggs, thereby reducing breeding habitats.

As seen by the evaluation, the conferences have increased knowledge and influenced behavior. To learn more about these events, please visit the U.S.-Mexico Border 2020 webpage.

ED_002319B_00013657-00030

COMMUNICATION COMMITTEE

General Coordinators

Lisa Almodovar
U.S. EPA Headquarters Offices
Washington, D.C.

Armando Yáñez Sandoval
SEMARNAT
Mexico City

Staff Members

Marta Jordan
U.S. EPA Headquarters Offices
Washington, D.C.
Jordan.Marta@epa.gov

Tadzio Clavel Herrera
SEMARNAT
Mexico City
tadzio.clavel@semarnat.gob.mx

Maria Sisneros
U.S. EPA Region 6
El Paso, Texas
sisneros.maria@epa.gov

Miguel Fragoso Romero
SEMARNAT
Mexico City
miguel.fragoso@semarnat.gob.mx

Jessica Helgesen
U.S. EPA Region 9
San Diego, California
helgesen.jessica@epa.gov

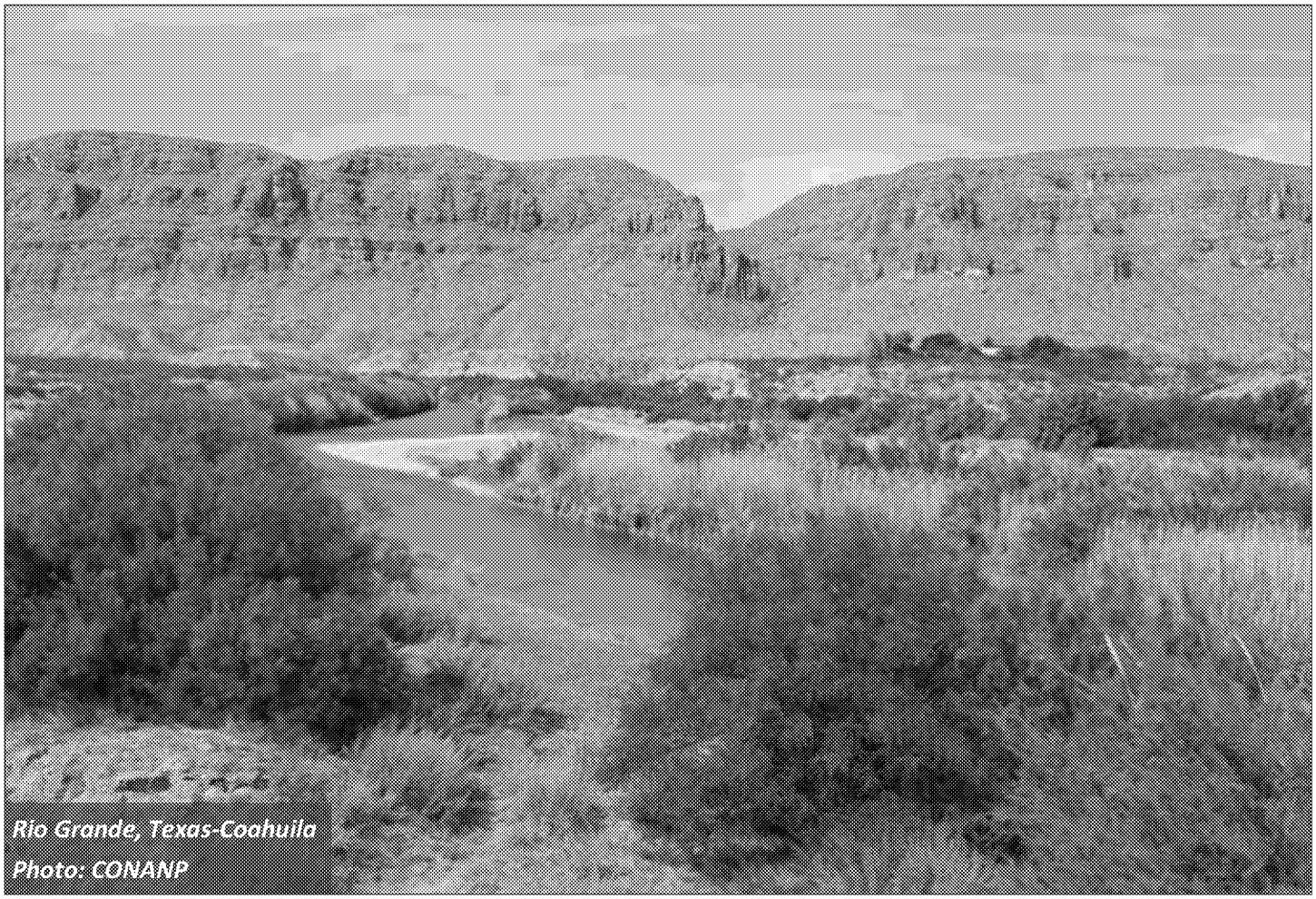
ED_002319B_00013657-00031

¡Visit our web pages!
www.epa.gov/border2020
www.gob.mx/semarnat

MISSION STATEMENT

As a result of the partnership among U.S. Border Tribes and federal, state and local governments in the United States and Mexico, the mission of the Border 2020 Program is to:

Protect the environment and public health in the U.S.-Mexico border region, consistent with the principles of sustainable development.



Rio Grande, Texas-Coahuila
Photo: CONANP

PROGRAMA AMBIENTAL MÉXICO - ESTADOS UNIDOS: FRONTERA 2020

FRONTERA 2020
BORDER 2020

REPORTE DE LOGROS OTOÑO 2018

SEMARNAT
SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES

EPA
United States Environmental Protection Agency

Foto portada:
Montañas Chisos, Texas
Archivos Fotográficos
Comisión Nacional de Áreas Naturales Protegidas de México (CONANP)

ED_002319B_00013658-00002

MENSAGE DE LOS COORDINADORES NACIONALES

El Programa Frontera 2020 continúa brindando una base sólida y dinámica para nuestra asociación binacional brindando soluciones a los desafíos ambientales y de salud pública en la región fronteriza. La colaboración es clave para lograr resultados exitosos, sustentables y de largo plazo. Como Coordinadores Nacionales, estamos comprometidos a trabajar juntos para avanzar la misión del Programa Frontera 2020: proteger el medio ambiente y la salud pública a lo largo de la región fronteriza entre México y los Estados Unidos.

Nuestros esfuerzos de colaboración con las Naciones Tribales fronterizas de los Estados Unidos y los gobiernos federal, estatal y local de ambos países han demostrado beneficiar a nuestro medio ambiente compartido y a los habitantes de ambos lados de la frontera. Hemos creado asociaciones e invertido nuestros recursos en proyectos que abordan temas como la calidad del aire, la calidad del agua, el tratamiento de aguas residuales, la gestión de residuos sólidos, la respuesta a emergencias y la gestión ambiental responsable.

Este informe destaca los logros del Programa Frontera 2020 durante los últimos dos años. Presentamos 22 proyectos que se han implementado y ejemplifican el progreso de nuestros esfuerzos para mejorar las condiciones de las comunidades fronterizas y nuestro medio ambiente compartido. A través de estos proyectos, también hemos podido realizar estudios o aplicar las mejores prácticas de gestión para lograr resultados exitosos en cumplimiento de los objetivos del Programa.

Reafirmando nuestro compromiso con el Programa Frontera 2020, nosotros, como Coordinadores Nacionales, apoyamos a nuestros socios, que incluyen a los tres niveles de gobierno, las Naciones Tribales fronterizas de los Estados Unidos y las comunidades indígenas mexicanas. Nos gustaría aprovechar esta oportunidad para expresar nuestro agradecimiento a las personas, comunidades y organizaciones dedicadas que apoyan y participan en las actividades del Programa para mejorar las condiciones ambientales y de salud pública en la región fronteriza. Reconocemos la importancia y el valor de la dedicación, el compromiso y la contribución de nuestros Socios al éxito del Programa.

La cooperación ambiental entre México y los Estados Unidos en la región fronteriza común es sin duda una historia de éxito y un ejemplo para el mundo, bajo la cual ciertamente vale la pena seguir construyendo. Le invitamos a reflexionar sobre nuestros logros recientes y le pedimos que continúe brindando su apoyo y su participando en la búsqueda de soluciones a los desafíos que aún existen en la región fronteriza.

¡Muchas gracias!

Enrique Lendo
Coordinador Nacional
México

Jane Nishida
Coordinadora Nacional
Estados Unidos de América

ED_002319B_00013658-00003

INTRODUCCIÓN

Reafirmando nuestro compromiso, 2017-2018

La frontera entre México y los Estados Unidos es una región geográfica dinámica y única que enfrenta muchos retos ambientales, incluida la mala calidad del aire, agua potable insegura e inadecuado tratamiento de aguas residuales, así como programas y servicios inadecuados para la gestión de residuos. La frontera es el hogar de más de 15 millones de personas, donde aproximadamente el 90% de la población reside en ciudades, mientras que la población restante se encuentra en pueblos pequeños o comunidades rurales. El **Programa Frontera 2020** es la más reciente iniciativa de cooperación México-Estados Unidos implementada en el marco del Convenio de La Paz de 1983, enfocándose en las comunidades ubicadas dentro de los 100 km a ambos lados de los más de 3,100 kilómetros de frontera. El Programa Frontera 2020 fomenta un enfoque regional de abajo hacia arriba para la toma de decisiones, el establecimiento de prioridades y la implementación de proyectos para abordar los desafíos ambientales y de salud pública en la región fronteriza.

El Programa está diseñado para aprovechar a las comunidades e interesados locales, así como para trabajar directamente con socios federales, estatales, tribales e internacionales para implementar proyectos y soluciones ambientales. Específicamente, los objetivos del Programa se centran en mejorar la calidad del aire y el agua, promover suelos limpios, fortalecer la preparación y respuesta a emergencias, fomentar el liderazgo ambiental y abogar por iniciativas de salud ambiental a lo largo de la frontera. Este informe de logros comparte un ejemplo de los éxitos que nuestro Programa ha alcanzado en los últimos años (2016-2018) y que mejoran la calidad de vida y nuestro entorno compartido.

Para obtener más información sobre los detalles de las metas y los objetivos del Programa Frontera 2020, lo invitamos a leer el documento del Programa o si está interesado en conocer más logros del mismo, visite su página de internet en las páginas de la SEMARNAT y/o la EPA para consultar los informes anteriores y otra información de interés.

ED_002319B_00013658-00004

MEJORANDO LA CALIDAD DEL AIRE

La mala calidad del aire puede tener importantes impactos económicos y sociales en la comunidad, incluyendo un aumento en la contracción de enfermedades, muerte prematura y una menor calidad de vida. La región fronteriza entre México y los Estados Unidos es vulnerable al movimiento transfronterizo de contaminantes, lo que incluye materia particular inhalable (hollín y polvo), ozono (smog) y monóxido de carbono. Las fuentes binacionales que contribuyen a este movimiento incluyen el polvo de las carreteras sin pavimentar y de las áreas abiertas, el humo de la quema ilícita de basura y llantas, así como fuentes móviles como vehículos pesados de carga, automóviles y camiones que están haciendo fila en los cruces fronterizos. El Programa Frontera 2020 ha apoyado la mejora de la calidad del aire mediante la expansión de las redes de monitoreo con un mayor acceso a sus datos, la mejora de la calidad del aire a través de Planes de Implementación Estatales (en ambos países) y programas educativos sobre la calidad del aire en interiores.

Taller de Eficiencia Energética en Tamaulipas

Participantes en el primer taller de eficiencia energética.

Incrementar la eficiencia energética en México se ha convertido en una estrategia en todos los niveles de Gobierno a fin de mejorar y asegurar la sustentabilidad a largo plazo en los edificios públicos y mejorar la seguridad del suministro eléctrico, a la vez que se reducen los impactos en el medio ambiente. La operación e instalación de los sistemas de alumbrado público, así como el consumo de energía en edificios públicos, representa uno de los principales gastos que enfrentan los municipios, llegando incluso a absorber hasta un 40% de su presupuesto anual, lo cual limita la capacidad de los gobiernos locales para enfocar sus esfuerzos en otras prioridades. Mediante un financiamiento otorgado por el Programa Frontera 2020, la Secretaría de Desarrollo Urbano y Medio Ambiente del estado de Tamaulipas llevó a cabo dos talleres sobre eficiencia energética dirigidos a los 10 municipios fronterizos del estado. Los materiales de los talleres proporcionaron información sobre las herramientas básicas necesarias para lograr una mayor eficiencia energética en la iluminación de espacios públicos, a la vez que se incrementan los ahorros económicos.

Estos talleres fueron parte de una serie de acciones para mejorar la eficiencia energética en el estado, incluyendo dos foros de energía: "Primer Foro Estatal de Energía. Tamaulipas, Energía que Mueve a México" y el tercer Congreso Internacional sobre Energías Renovables titulado "Perspectivas de la Energía en México". La realización de estos talleres coincidió con la puesta en marcha de un proyecto eólico demostrativo que incluye la operación de cuatro aerogeneradores con el objetivo de promover el uso de energías renovables en el estado. Asimismo, el estado realizó la distribución de 10 mil "Guías Prácticas para el Ahorro de Energía" con el objetivo de sensibilizar a la población sobre los beneficios de instalar tecnologías ecológicas en sus hogares. Como resultado de los talleres, 10 municipios se comprometieron a realizar una auditoría energética en sus edificios públicos, beneficiando a 1.7 millones de habitantes.

ED_002319B_00013658-00005

Viviendas Sanas y Resilientes en Ciudad Juarez

Las familias de bajos ingresos cuentan con recursos limitados para implementar medidas de ahorro de energía y agua en sus hogares. Esto es generalmente debido tanto a la falta de conocimientos como a insuficiente asistencia técnica y/o recursos financieros. La falta de acceso a financiamiento para cubrir sus necesidades económicas limita su acceso a energías limpias y servicios básicos. La Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario de Ciudad Juárez, A.C. (FEMAP) ha operado durante treinta años un programa de microcréditos en la región; en este lapso se han entregado más de 40,000 microcréditos a los habitantes de bajos recursos para mejoras en sus hogares.

Con el apoyo del Programa Frontera 2020, FEMAP desarrolló un proyecto para identificar e implementar opciones de infraestructura verde y elementos de ahorro de energía para las familias de escasos recursos que buscan mejorar sus hogares en una colonia de rápido crecimiento en Ciudad Juárez. El proyecto ofreció asistencia técnica y financiera a 50 hogares (más de 200 personas) para la implementación de estas opciones y elementos energéticamente eficientes. En coordinación con empresas, instituciones académicas y organizaciones civiles sin fines de lucro, los residentes tuvieron acceso a asistencia técnica de expertos que los guiaron y enseñaron sobre los elementos de la infraestructura verde que podrían ser incorporados y adoptados en sus hogares, así como el acceso a materiales ecológicos.

El proyecto resultó en un ahorro de $630 dólares, 11.249 kW/hr, en el costo de energía y un ahorro de 530,000 litros de agua, equivalentes a $500 dólares, luego de las mejoras realizadas en 45 de las 50 viviendas mediante la instalación de:

- Cerca de 250 focos LED;
- 200 sellados de ventanas;
- 50 regaderas de bajo consumo;
- 50 filtros de agua;
- techos y paredes aislantes.

Además de las mejoras realizadas directamente en sus hogares, se desarrolló un catálogo de eco-materiales con el apoyo del Programa de Arquitectura de la Universidad Autónoma de Ciudad Juárez. Este catálogo incluye información sobre mejores prácticas y una evaluación de cada una de las ecotecnologías seleccionadas, identificando aquellas viables de implementación en comunidades marginadas ya que los catálogos existentes están enfocados mayoritariamente en vivienda nueva.

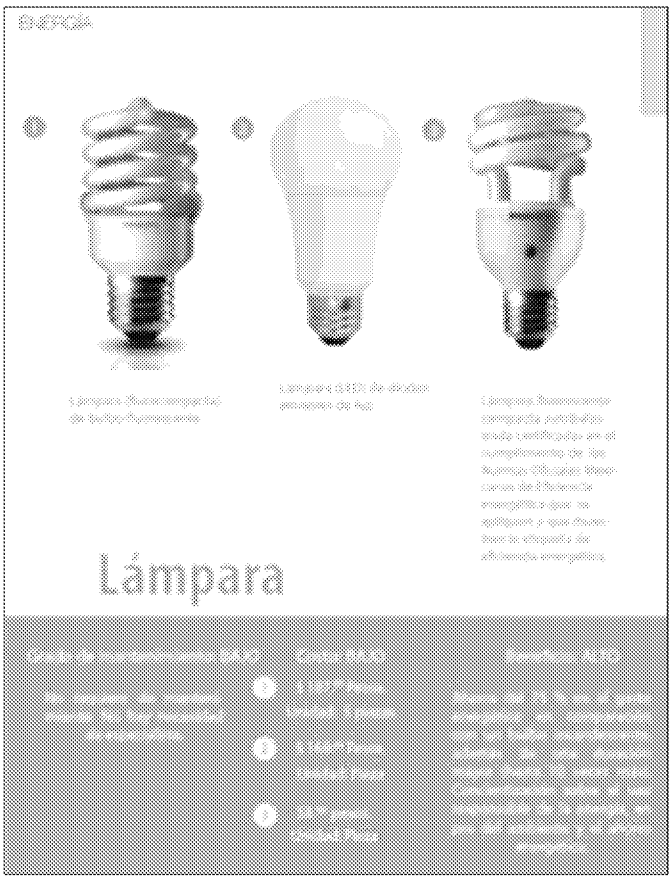


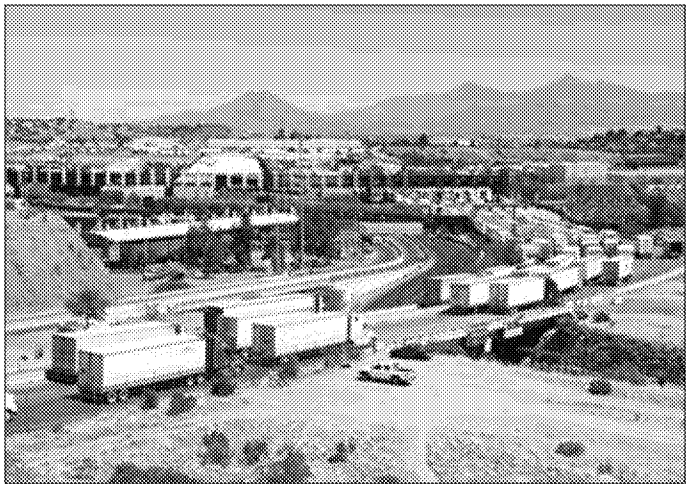
Ilustración. Descripción de los diferentes tipos de focos del catálogo.

ED_002319B_00013658-00006

Cuantificando la Disminución de Emisiones Derivada de la Reducción en los Tiempos de Espera en el Cruce Fronterizo Mariposa

El Cruce Fronterizo Mariposa en Nogales, Arizona, es un importante cruce terrestre en la región fronteriza México-Estados Unidos con más de 7 millones de vehículos que cruzan al año, incluidos 350,000 camiones de carga. Las autoridades del cruce fronterizo están implementando un programa piloto innovador realizando inspecciones conjuntas a fin de reducir los tiempos de espera de los camiones de carga. Se espera que este programa piloto reduzca significativamente los tiempos de espera, de 8 horas a 1 hora, para los camiones de carga en dirección a los Estados Unidos. Esta reducción en los tiempos de espera reducirá las emisiones de los vehículos y acelerará el comercio. Actualmente, Nogales no cumple los estándares de emisiones de partículas PM^{10} y $PM^{2.5}$ las cuales pueden causar problemas respiratorios y cardíacos, especialmente en adultos mayores y niños pequeños. La reducción de emisiones de fuentes móviles puede mejorar la calidad del aire y la salud pública en la región.

El Programa Frontera 2020 otorgó financiamiento a la Asociación de Investigación de América del Norte (NARP, por sus siglas en inglés) para implementar un estudio que detalle los beneficios de la reducción de emisiones de este proyecto piloto. Más de 400 vehículos fueron encuestados para obtener información sobre los tiempos de espera, así como la marca y modelo del vehículo, lo que permitió a los investigadores calcular sus emisiones.



Camiones en espera de ingresar a las instalaciones Unificadas para el Procesamiento de Carga en Nogales.

Encuesta a un chofer de un camión después de la inspección.

El Simulador de Emisiones de Vehículos a Motor de la EPA (MOVES, por sus siglas en inglés), un sistema de modelado que estima las emisiones de fuentes móviles a nivel nacional, municipal y de proyecto de los contaminantes atmosféricos criterio, está siendo utilizado por los investigadores para cuantificar las reducciones de emisiones durante los tiempos de espera en el cruce fronterizo. Los datos preliminares muestran que la reducción de los tiempos de espera ha reducido las emisiones vehiculares. Además, se detectó que la reducción de emisiones también se debe a que los vehículos procesados a través de la Instalación Unificada para el Procesamiento de Carga tienden a ser más nuevos y utilizan más tecnologías para la reducción de emisiones. La NARP está trabajando en el análisis de datos de las encuestas y en la cuantificación de la reducción de emisiones, así como en el informe final el cual estará disponible a fines de 2018.

ED_002319B_00013658-00007

Reduciendo los Desencadenantes del Asma Infantil en los Hogares

Los niños del Condado Imperial, California, viven con altas concentraciones de factores desencadenantes del asma tanto en el ambiente interior como en el exterior, incluida la contaminación transfronteriza del aire. Estos factores han contribuido a que el Condado Imperial experimente algunas de las tasas más altas de visitas a la sala de emergencias en el estado de California a causa del asma.

Para atender este problema, el Programa Frontera 2020 se asoció y financió el Programa de Asma Infantil del Valle Imperial (IVCAP, por sus siglas en inglés) durante el periodo 2015-2017 con el objetivo de llevar a cabo inspecciones en los hogares e identificar los desencadenantes del asma, así como colaborar con las personas que se dedican al mantenimiento de casas en la implementación de estrategias para fomentar hogares saludables. Durante este período, el 94% de los participantes inscritos en el programa informaron que no visitaron salas de emergencia ni fueron hospitalizados. Además, el IVCAP informó a más de 2.000 personas mediante campañas de difusión y educación, su inscripción en el programa, así como otras actividades de participación comunitaria.

Uno de los eventos comunitarios celebrados en el Condado Imperial.

> *"Disfruto educando a los padres de asmáticos sobre lo que pueden hacer para mejorar el entorno de su hogar, como presentarles productos de limpieza no tóxicos."*
>
> **Rubi Alvarez**
> **Trabajadora de Salud Comunitaria**
> ***(Promotora)***

La EPA continúa apoyando e impactando positivamente a las familias de bajos ingresos financiando actividades educativas sobre asma en el hogar en colaboración con el IVCAP mediante una subvención establecida en la Ley de Aire Limpio. Los fondos aprobados para el periodo 2017-2018 tienen como objetivo proporcionar evaluaciones y herramientas para controlar los desencadenantes del asma en el hogar que afectan a las familias y a los adolescentes de 17 años o menos. Estas evaluaciones son llevadas a cabo por Promotoras o trabajadoras de la salud comunitarias.

A la fecha, IVCAP ha inscrito a casi 90 asmáticos adicionales en su programa, con un 80% de ellos reduciendo, evitando y/o eliminando dos o más desencadenantes de asma identificados en sus hogares después de la evaluación. Las familias recibieron propuestas adecuadas al conjunto único de factores desencadenantes identificados en sus hogares.

Al término de este esfuerzo de dos años, el IVCAP espera atender a otras 70 familias y llevar a cabo evaluaciones en sus hogares esperando disminuir las visitas a la sala de emergencias y las hospitalizaciones. Además de las visitas domiciliarias, el IVCAP aumentará las actividades de divulgación dirigidas a aumentar la conciencia sobre el asma con programas de educación para los residentes diagnosticados con asma sobre los beneficios de mejorar el entorno doméstico interior para mantener el control a largo plazo de esta condición. Para obtener más información sobre el asma y sus desencadenantes, visite la página sobre asma de la EPA.

ED_002319B_00013658-00008

MEJORANDO LA CALIDAD DEL AGUA

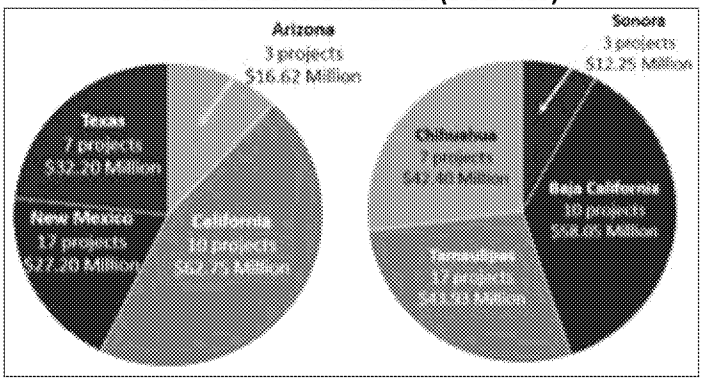
Los ríos y las cuencas hidrográficas no conocen fronteras y, en algunos casos, definen la frontera entre México y los Estados Unidos Los aguas pluviales contaminadas y las aguas residuales de infraestructura deteriorada, así como los fenómenos meteorológicos extremos pueden contaminar los cursos de agua transfronterizos, causando problemas de salud pública en la región fronteriza. El Programa Frontera 2020 ha mejorado la calidad del agua mediante el financiamiento de proyectos piloto para la gestión o mitigación de aguas pluviales, como infraestructura verde, programas para la reducción de residuos sólidos e investigación. Los fondos del Programa de Infraestructura Hidráulica Fronteriza (BWIP, por sus siglas en inglés) se han utilizado tanto para rehabilitar como para construir infraestructura para agua potable y para aguas residuales.

Programa México-Estados Unidos de Infraestructura Hidráulica Fronteriza

A través del Programa México-Estados Unidos de Infraestructura Hidráulica Fronteriza (PIHF) se otorgaron recursos para la planeación, diseño y construcción de proyectos prioritarios de infraestructura de agua potable y aguas residuales a lo largo de la frontera. El FIHF ayuda a las comunidades desfavorecidas a identificar y asegurar las fuentes de financiación disponibles y abordar los déficits de financiación para garantizar el acceso al agua potable y al saneamiento adecuado, a menudo por primera vez.

El FIHF proporciona capacitación administrativa y supervisión técnica a las comunidades que carecen de estas con el propósito de que puedan cumplir con los requisitos de diseño y planificación de proyectos aumentando así las oportunidades de financiamiento para la asistencia de construcción proveniente de otros programas, como el Programa de Áreas Marginadas de Texas, el Fondo Rotatorio Estatal, los programas de agua y medio ambiente para el desarrollo rural del Departamento de Agricultura de los Estados Unidos (USDA, por sus siglas en inglés)) y del Banco de Desarrollo de América del Norte (BDAN).

PRIORIZACIÓN DE PROYECTOS 2017 POR ESTADO FRONTERIZO (DÓLARES)



Los ríos ubicados en la región fronteriza entre México y los Estados Unidos en ocasiones definen de forma natural el límite geográfico internacional, como lo hace el Río Bravo, o bien fluyen desde México a los Estados Unidos, como es el caso del río Tijuana. Los proyectos financiados por el FIHF en ambos países abordan las descargas de aguas residuales transfronterizas, ya que su tratamiento antes de que entren en los cuerpos de agua fronterizos compartidos es la opción más viable desde el punto de vista técnico y financiero para prevenir su contaminación. Como parte de esta asociación, México iguala dólar por dólar las inversiones que la EPA proporciona a proyectos de infraestructura hidráulica, lo que ayuda a proteger la salud pública y el medio ambiente.

Logros del Programa

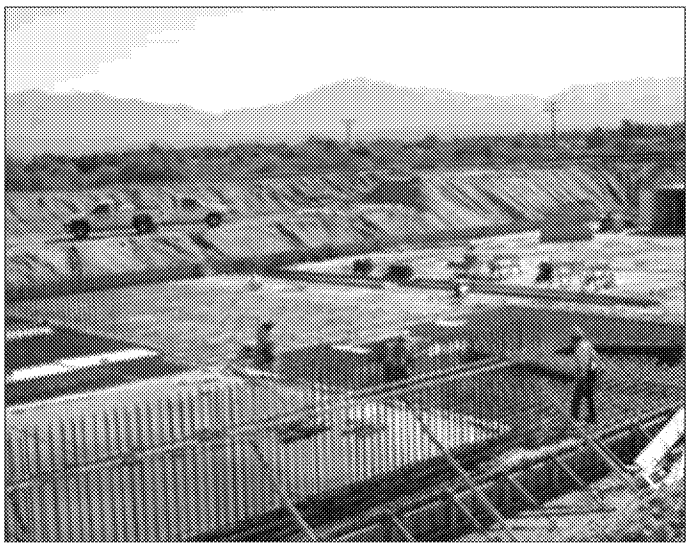
Desde 2003, a través de 108 proyectos financiados, el FIHF ha proporcionado acceso a agua potable a 70,000 hogares, así como sistemas para la recolección y tratamiento de aguas residuales a 673,000 hogares que nunca habían recibido este servicio. En 2017, a través del BDAN, la EPA anunció un nuevo ciclo de solicitud de proyectos para recibir financiamiento del FIHF. Se identificaron

ED_002319B_00013658-00009

más de 60 proyectos elegibles de agua potable y aguas residuales con un costo de construcción total estimado en $296 millones de dólares que abordan las condiciones ambientales y de salud pública en la región fronteriza.

Desarrollando capacidades técnicas y de gestión en Sunland Park, Nuevo México, mediante asociaciones

La construcción de una nueva planta de tratamiento en Sunland Park, una comunidad pequeña y marginada en Nuevo México, comenzó en agosto de 2017. La Autoridad de Servicios Regionales de Camino Real (CRRUA), la autoridad sanitaria local, se enfrentó a problemas debido a infraestructura inadecuada y obsoleta, el cumplimiento ambiental y la falta de capacidad y recursos gerenciales. Durante casi dos años, la EPA, el Departamento de Medio Ambiente de Nuevo México (NMED) y el BDAN trabajaron en estrecha colaboración con CRRUA para implementar un plan de desarrollo de capacidades para garantizar que esta institución pudiera administrar efectivamente una planta nueva de tratamiento de aguas residuales. La USEPA proporcionó más de $816 mil dólares para implementar con éxito este plan y la asistencia técnica para la planificación y el diseño del proyecto; posteriormente, la EPA y el NMED financiaron la construcción de una planta de tratamiento con un costo de $12.7 millones de dólares, de los cuales la EPA contribuyó con $9 millones y el NMED proporcionó los $3.7 millones restantes con fondos estatales. La planta de tratamiento mejorará el acceso a servicios sustentables de tratamiento de aguas residuales a aproximadamente 6,440 residentes de Sunland Park y Santa Teresa y reducirá en gran medida los riesgos de descargas de aguas residuales no tratadas o inadecuadamente tratadas al río Bravo.



Construcción de la nueva planta de tratamiento de Sunland Park.

El presidente de la junta directiva de CRRUA, Josh Orozco, enfatizó la importancia de finalmente poder proporcionar la capacidad adecuada de tratamiento de aguas residuales en la comunidad. Durante la ceremonia de inauguración en julio de 2017, dijo que esta nueva planta "... no solo permitirá que más hogares y más empresas reciban ayuda, sino que también mejorará la salud de nuestra comunidad."

Protegiendo la cuenca del río Tijuana de la contaminación transfronteriza

El río Tijuana, que tiene su origen en Baja California, México, cruza la frontera en San Ysidro, California, y desemboca en el Océano Pacífico al sur de Imperial Beach, California. Las descargas de aguas residuales y tratadas inadecuadamente en Tijuana pueden afectar la economía, la salud y el medioambiente de comunidades estadounidenses como Imperial Beach y Chula Vista en el condado de San Diego. Como parte de un esfuerzo multilateral y de largo plazo para abordar estas descargas transfronterizas, se está llevando a cabo un proyecto en el marco del FIHF para reparar algunos de los recolectores de aguas residuales deteriorados. Estos recolectores transportan las aguas residuales de los hogares a la planta de tratamiento de aguas residuales de Tijuana. Si no son reparados, pueden producirse colapsos catastróficos que darían lugar a cientos de millones de litros de aguas residuales no tratadas que fluirían hacia los Estados Unidos y hacia las playas del Condado de San Diego. La cooperación existente entre las agencias de agua mexicanas y la EPA se traduce en $7 millones de dólares invertidos en la reparación de poco más de 9.6 km de recolectores de aguas residuales y la rehabilitaron 30 pozos de registro. Asimismo, está en marcha una segunda fase para la construcción de 4 km de líneas de alcantarillado adicionales. El costo estimado de este proyecto es de $3 millones de dólares, con una contribución proyectada por parte de la EPA de $1.4 millones.

ED_002319B_00013658-00010

Campaña de Difusión Pública sobre Aceites y Grasas en Brownsville

La Junta de Servicios Públicos de Brownsville (BPUB, por sus siglas en inglés) recibió financiamiento del Programa Frontera 2020 por $25 mil dólares en febrero de 2016 para la difusión de información y educación sobre el impacto de la contaminación con grasas y aceites en la calidad del agua de las comunidades en Brownsville, Texas, y Matamoros, Tamaulipas. Históricamente, las llamadas al BPUB de zonas residenciales y comerciales por problemas relacionados con grasas y aceites ocurrieron en promedio cinco veces por semana, con un aumento de incidencias durante el mes de diciembre.

El BPUB se integró a un programa de reducción voluntario de la Comisión de Calidad Ambiental de Texas (TCEQ, por sus siglas en inglés) llamado Iniciativa Sanitario para el Desbordamiento del Alcantarillado. Este programa voluntario requiere que el BPUB trabaje para reducir la descarga no autorizada de aguas residuales no tratadas o parcialmente tratadas en el sistema de recolección o sus componentes (por ejemplo, alcantarillas, estaciones de bombeo o de limpieza) antes de llegar a una planta de tratamiento de aguas residuales como resultado de problemas relacionados con aceites y grasas. Mediante campañas educativas para el público en general y para establecimientos comerciales, el BPUB tuvo como objetivo reducir el número de llamadas de servicio relacionadas con aceites y grasas, así como crear conciencia sobre las técnicas apropiadas para la de eliminación adecuada de éstas.

Esfuerzos de marketing y educación

El 16 de marzo de 2016, el BPUB lanzó oficialmente su campaña de alcance masivo "Grasas y Aceites" en su reunión pública mensual en Brownsville. Durante la reunión pública, anunciaron su colaboración con la ciudad de Matamoros con el nuevo programa de divulgación sobre aceites y grasas. El BPUB informó a las comunidades de ambos lados de la frontera a través de una serie de actividades que incluyeron anuncios, volantes educativos, videos publicitarios, talleres y cobertura de prensa. Las plataformas de redes sociales como Facebook, Twitter y YouTube también fueron utilizadas para dirigirse al público más joven y compartir las campañas educativas producidas en video y audio. A lo largo del período del proyecto, se llevaron a cabo más de 80 eventos de divulgación pública y difusión en apartamentos y complejos de viviendas, iglesias e instituciones educativas, así como en negocios comerciales en los que participaron más de 1,700 personas.

Evento de difusión en Brownsville.

Más importante aún, el BPUB, a través de sus actividades de promoción, ha reducido consistentemente el número de llamadas relacionadas con grasas y aceites de 731 en 2013 a 417 en 2016, una reducción del 43% en tan solo cuatro años. Durante el período del proyecto, en 2015 y 2016, el BPUB recibió 477 y 417 llamadas, respectivamente, para atender problemas relacionados con grasas y aceites. En general, el proyecto cumplió con sus objetivos, entre los que se incluía el de reducir el número de llamadas de incidencias relacionadas con grasas y aceites en un 13% o en 60 llamadas. Para obtener más información sobre los esfuerzos que el BPUB realiza en este tema, por favor visite su página en internet.

ED_002319B_00013658-00011

Construyendo Infraestructura Verde en Espacio Público de la Avenida Valle del Sol

La Organización Mundial de la Salud (OMS) establece un indicador de sustentabilidad de 9 m^2 de áreas verdes por habitante. La región fronteriza de Ciudad Juárez y El Paso experimenta un marcado déficit de espacios verdes urbanos; especialmente en Ciudad Juárez, donde se calcula existen sólo 4.5 m^2 de área verde por habitante. Desde 2013, la ciudad ha buscado activamente asociarse con diversas organizaciones para incrementar su infraestructura y espacios verdes. Estos proyectos no sólo pueden ser rentables, sino que pueden atender problemas de inundación asociados con la falta de infraestructura de aguas pluviales y embellecer las áreas con alto tránsito peatonal.

En 2016, con apoyo del Programa Frontera 2020 se financió un parque situado en la avenida Valle del Sol y la calle Solares. Ubicado a menos de un kilómetro de la línea fronteriza, este parque es el único espacio verde disponible para la comunidad de la zona. Con el paso de los años, la condición del parque se fue degradando debido a la falta de mantenimiento y dejó de servir como un área de esparcimiento y reunión para los miembros de la comunidad. El Instituto Tecnológico de Ciudad Juárez (ITCJ), promotor del proyecto, transformó el parque en un espacio adecuado para ser utilizado por los miembros de la comunidad e implementó medidas para atender los problemas de inundación que experimenta esta zona cuando llueve.

Sistemas pasivos para la recolección de agua de lluvia en el parque.

Con el financiamiento otorgado por el Programa, la ITCJ desarrolló este proyecto con los siguientes objetivos:

- Construir sistemas pasivos para el almacenamiento de aguas pluviales;
- Conservar agua potable usada para regar;
- Proteger el suelo de la erosión causada por el viento; e
- Incorporar y aprovechar la infraestructura urbana existente.

El proyecto inició en junio de 2016 con la limpieza del sitio y el acondicionamiento de la banqueta, posteriormente se trabajó en la construcción de sistemas pasivos para la recolección de aguas pluviales, así como en la recuperación y reconfiguración de la vegetación existente en el lugar. La cantidad de lluvia monitoreada de julio de 2016 a noviembre de 2017 (17 meses) resultó en la captura de un volumen total de 1,788 metros cúbicos de aguas pluviales.

En la actualidad, los sistemas pasivos de recolección de agua continúan funcionando eficazmente y la vegetación está prosperando. El parque se sostiene casi en su totalidad con agua de lluvia, excepto en casos de sequía extrema o para el riego de vegetación recién sembrada.

Gracias a una donación de las autoridades municipales, el suelo del parque está protegido de la erosión eólica por una cubierta de cáscara de nuez que permite que se conserve la humedad del suelo.

Finalmente, las encuestas realizadas en la zona mostraron que el valor social del parque ha aumentado sustancialmente. Antes del proyecto, el lugar era considerado como un espacio negativo por los residentes de la comunidad y ahora se lo ve como un espacio público agradable y con valor social.

ED_002319B_00013658-00012

Estudiando Métodos de Desarrollo de Bajo Impacto para la Gestión de Aguas Pluviales en el Sur de Texas

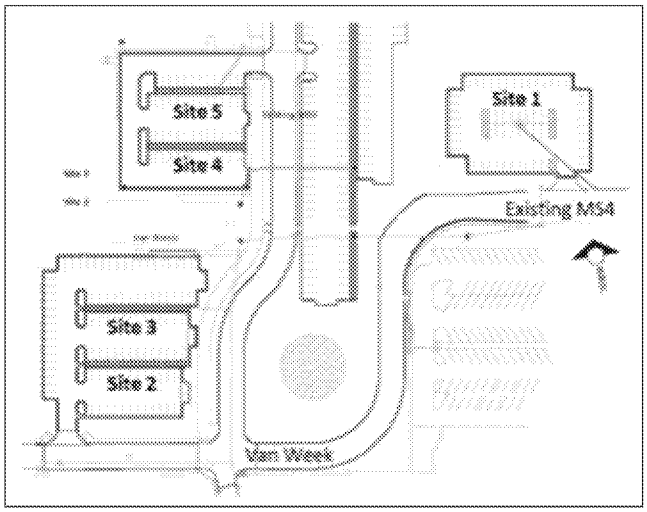
Varias comunidades en el Valle Bajo del Río Bravo en el sur de Texas han estado evaluando varios métodos de Desarrollo de Bajo Impacto (DBI) para incorporarlos a sus comunidades. Los DBI proporcionan varias ventajas sobre las prácticas tradicionales para la gestión de aguas pluviales, tales como: reducir o eliminar la necesidad de grandes estanques de captación y retención de agua; disminuir la contaminación de los cuerpos de agua; disminuir la erosión; incrementar el aspecto atractivo de la comunidad; flexibilidad en el diseño de los proyectos; todo a bajos costos. Un equipo de investigación liderado por el Dr. Jungseok Ho, de la Universidad de Texas en el Valle Bajo del Río Bravo (UTRGV, por sus siglas en inglés)), evaluó el uso de drenajes sostenibles en estacionamientos para determinar el mejor material poroso disponible a nivel local, así como un diseño estándar que podría ser utilizado por las localidades de la región. Los drenajes sostenibles generalmente son diseñados para el manejo de aguas pluviales en superficies impermeables de gran tamaño, como estacionamientos, incorporando materiales porosos y elementos de paisaje urbano con el propósito de eliminar los desechos y la contaminación de las aguas pluviales.

MATERIALES POROSOS Y TAMAÑO DE DRENAJE POR SITIO DE ESTUDIO

Sitios de Prueba	Drenaje Sostenible	Material Poroso	Tamaño (acres)
Sitio 1	Sin drenaje	Sin drenaje	.237
Sitio 2	Drenaje 1	Piedra Pómez	.216
Sitio 3	Drenaje 2	Arena fabricada	.218
Sitio 4	Drenaje 3	Vidrio reciclado triturado	.209
Sitio 5	Drenaje 4	Arena natural	.206

Basándose en estudios previos realizados por el Dr. Ho, su equipo evaluó cinco sitios de prueba que utilizaron varios materiales porosos (piedra pómez, arena fabricada, vidrio triturado reciclado y arena natural) en los estacionamientos del campus Edinburg de la UTRGV.

El proyecto evaluó el rendimiento hidrológico de los cuatro materiales diferentes utilizados en los cinco sitios de prueba. Los resultados obtenidos para el Sitio 2, con el material de piedra pómez, mostraron un mejor rendimiento hidrológico teniendo en cuenta los cuatro criterios definidos para la elección: 1) reducción del volumen de aguas pluviales; 2) reducción del caudal máximo; 3) atenuación de los puntos máximos del caudal; y 4) filtración de los sólidos contenidos en el caudal de aguas pluviales. La piedra pómez mostró la mayor filtración de los cuatro materiales utilizados con un 58% y una atenuación del volumen máximo del caudal en un 64%.



Ubicación de los Sitios de estudio en el Campus Edinburg de la UTRGV.

Los resultados del estudio de suelo muestran que cualquier mezcla que contenga más del 40% de piedra pómez del volumen total produce resultados prometedores. Tres mezclas de arena fabricada, arena natural y vidrio triturado reciclado con un 40% de piedra pómez cada una, alcanzaron un promedio de 30% de retención de aguas pluviales y 52% de filtración de residuos.

En general, con base en las pruebas de campo, la piedra pómez tuvo el mejor desempeño de los materiales porosos utilizados, con resultados que muestran que la utilización de mezclas con al menos un 40% de piedra pómez es el material ideal para esta región. Sin embargo, cabe destacar que es necesario realizar más estudios para conocer la disponibilidad y costo de este material en la región, así como el costo de la construcción de proyectos para determinar su nivel de efectividad final y ser utilizado por las comunidades de la región.

ED_002319B_00013658-00013

Infraestructura Verde para Control de Sedimentos y Protección Contra Inundaciones en Ambos Nogales

El Interceptor de Desagüe Internacional (IDI) es una tubería que transporta las aguas residuales no tratadas de Nogales, Sonora, y Nogales, Arizona, (Ambos Nogales) a la Planta Internacional de Tratamiento de Aguas Residuales de Nogales nueve millas al norte de la frontera en Río Rico, Arizona. Dado que el sistema de recolección de aguas residuales en Sonora actúa como transporte combinado de agua sanitaria y pluvial, a lo largo de los años los flujos de sedimentos y la infiltración de aguas pluviales en Sonora han causado la falla del IDI en Arizona. El deterioro ocasionado por el sedimento ha debilitado el sistema, lo que ha provocado roturas en las tuberías del IDI, la última en julio de 2017, lo que ha generado derrames de aguas residuales en el Arroyo Nogales. Las fallas reiteradas del IDI podrían ocasionar la contaminación de los recursos hídricos subterráneos de Arizona.

Parque diseñado para recolectar agua de lluvia y prevenir inundaciones.

El Grupo de Gestión de Cuencas Hidrográficas (WMG, por sus siglas en inglés), una organización sin fines de lucro con sede en Tucson, Arizona, encabezó un proyecto financiado por el Programa Frontera 2020 para demostrar el potencial de infraestructura verde existente para disminuir la cantidad de sedimentos durante las inundaciones provocadas por lluvias que están deteriorando el IDI. La infraestructura verde, de acuerdo con la EPA, utiliza la vegetación, los suelos y otros elementos y prácticas para restaurar algunos de los procesos naturales necesarios para gestionar el agua y crear entornos urbanos más saludables. El proyecto utilizó un enfoque de tres frentes que incluyó:

- Desarrollo de capacidades (capacitaciones comunitarias en actividades de planificación, diseño e implementación);
- Sitios piloto (dos proyectos para el control de sedimentos); y
- Desarrollo de políticas (resolución para expandir y fortalecer las prácticas de infraestructura verde en Nogales, Sonora).

Trabajando con el gobierno local y los residentes de Nogales, Sonora, el WMG completó dos sitios piloto con un área de aproximadamente 10,000 m^2, similar al área de un campo de fútbol. Además, 88 residentes asistieron a un taller de capacitación y más de 500 miembros de la comunidad recibieron información sobre conceptos de infraestructura verde a través de eventos comunitarios y participación en proyectos. Uno de los sitios piloto es un parque de lluvia que ahora colecta un volumen de entre 50,000 y 70,000 litros de agua pluvial cada evento de lluvia. Estas modificaciones de infraestructura verde eliminan casi por completo la contribución de sedimentos originados en el parque durante inundaciones provocadas por lluvias río abajo en el área de Ambos Nogales.

El proyecto atrajo el apoyo de un Diputado del Congreso de Sonora electo en representación del municipio de Nogales y que es miembro de la Comisión de Energía, Medio Ambiente y Cambio Climático del Congreso Estatal; por lo que tuvo un impacto más allá del nivel local fomentando que el Congreso de Sonora adoptara una ley de infraestructura verde en abril de 2017, la primera de su tipo aprobada en México.

Este proyecto incrementó la capacidad de la comunidad para usar infraestructura ecológica para reducir las inundaciones en el área de Ambos Nogales e impulsó al gobierno local a apoyar el futuro desarrollo de infraestructura verde.

ED_002319B_00013658-00014

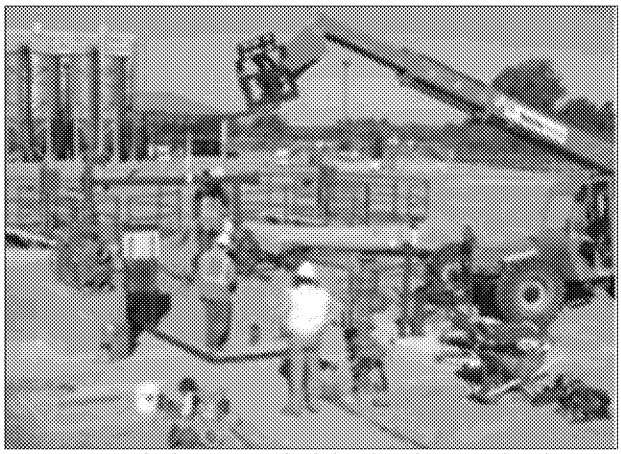
Protegiendo los Recursos Hídricos de la Ciudad de Holtville en el Condado Imperial

Ubicada en el Condado Imperial, California, la planta de tratamiento de aguas residuales (PTAR) de la ciudad de Holtville no cumplía con los requisitos de descarga de amoníaco y otros contaminantes que fluían hacia el drenaje Pear, que alimenta el río Álamo y finalmente el Mar de Salton en el sur de California. Gracias al financiamiento del Fondo México-Estados Unidos de Infraestructura Hidráulica Fronteriza (FIHF) y del Fondo Rotatorio Estatal de Agua Limpia del estado de California, la PTAR existente se modernizó y ahora brinda servicio de aguas residuales al 100% para la zona beneficiando a 6,594 residentes de Holtville.

Considerado un cuerpo de agua deteriorado, las descargas contaminadas de Holtville exacerbaron las difíciles condiciones que enfrentan las comunidades de flora y fauna que viven en el Mar de Salton. Con el paso de los años, los niveles de agua en el Mar de Salton han disminuido rápidamente debido a la evaporación y han aumentado tanto la salinidad y como las concentraciones de contaminantes. El lecho del lago expuesto ha sucumbido a los vientos del desierto que ahora llevan el polvo contaminado a las comunidades circundantes. Estas partículas de polvo pueden contribuir a los ataques de asma en todo el Valle Imperial. La PTAR de Holtville, que ahora cumple con todos los requisitos, no solo aumentará las posibilidades de supervivencia de los diversos organismos dependientes del Mar de Salton, sino que la afluencia de agua tratada adecuadamente evitará que el lecho del lago esté expuesto al viento y, a su vez, el polvo generado no afecte a los residentes urbanos vulnerables.

"La EPA está comprometida a ayudar a las comunidades de todo el Valle Imperial a proteger los recursos hídricos vitales del estado. Nuestras inversiones renuevan la infraestructura obsoleta, lo que puede ser costoso para comunidades pequeñas como Holtville."

Tomas Torres
Director de la División de Agua
Oficina Regional 9 de la USEPA



Construcción de una estación de bombeo de aguas pluviales.

Algunos de los nuevos componentes instalados en la PTAR de Holtville incluyen una cortina de barra de operación automática que maximiza la eliminación de objetos grandes y un sistema de lodo activado que mejora la efectividad del tratamiento y la calidad del agua tratada. Así mismo, se rehabilitó el edificio de operaciones de la planta de tratamiento y se instalaron equipos de laboratorio modernos, lo que permitirá que se puedan llevar a cabo los análisis necesarios para asegurar que el agua tratada cumpla con los requisitos para su descarga.

ED_002319B_00013658-00015

PROMOVIENDO SUELOS LIMPIOS

En la región fronteriza entre México y los Estados Unidos, la gestión de los residuos sólidos no ha seguido el ritmo del aumento de la población, lo que ha dado como resultado basura no gestionada así como infraestructura y servicios sobrecargados y la pérdida de posibles materiales valiosos en rellenos sanitarios o vertederos ilegales. La basura sin gestionar contamina la tierra y el agua, y tiene impactos adversos en la salud pública, tales como propiciar incendios contribuyendo a la mala calidad del aire o servir como hábitat de reproducción de mosquitos y la propagación de enfermedades transmitidas por vectores como el Zika. La Gestión Sustentable de Materiales (GSM) promueve un enfoque de ciclo de vida que va desde la optimización del diseño hasta el proceso de producción final de bienes y servicios para reducir el desperdicio, eliminar la toxicidad y maximizar la reutilización. Los Socios del Programa Frontera 2020 han avanzado la GSM a través de limpiezas y proyectos para reciclar residuos domésticos peligrosos, aparatos electrónicos y llantas de desecho.

Apoyando a los Recicladores de Automóviles

Cada año, los vehículos que alcanzan el final de su vida útil son depositados en deshuesadoras ubicadas en la región fronteriza entre México y los Estados Unidos. A menudo, estos vehículos desechados no se procesan adecuadamente para recuperar los materiales reutilizables o reciclables ni eliminar los materiales peligrosos que contienen. A medida que los vehículos desechados se acumulan, el terreno que ocupan se convierte en un paisaje desagradable a la vista dentro de las comunidades locales y representan un riesgo para la salud humana y el medio ambiente. Los vehículos suelen contener materiales peligrosos como anticongelantes, aceite usado o plomo y, cuando se abandonan, se convierten en una responsabilidad legal para los gobiernos locales.

En respuesta a las necesidades de los recicladores automotrices en la región fronteriza, la SEMARNAT y la EPA desarrollaron una "Guía para Vehículos al Final de su Vida Útil". Este documento fue desarrollado para compartir prácticas efectivas en la preparación de vehículos al final de su vida útil para que sean reciclados adecuadamente y contribuir al objetivo del Programa de reducir el desperdicio mediante la recuperación segura y responsable de los materiales contenidos en ellos.

La Guía forma parte de un paquete que incluye también un juego de tarjetas de referencia rápida sobre residuos y un póster. Estos materiales instructivos pueden ser utilizados para proveer información oportuna en las instalaciones de desmontaje a los técnicos sobre la preparación adecuada de los vehículos para que su desmontaje sea conducido mediante una gestión ambientalmente racional. Además, la Guía analiza la eliminación responsable, la recuperación de costos, la salud, la seguridad y la protección, las normas que rigen a la industria y una lista de vehículos que contienen interruptores de mercurio.

Los flujos de desechos específicos que representan un alto riesgo para los trabajadores y el medio ambiente se destacan en la Guía y en un conjunto de tarjetas que incluyen diagramas. Los flujos de desechos incluidos son: plomo, interruptores de mercurio, refrigerantes, baterías de desecho, así como líquidos y combustible residuales. En general, la Guía proporciona materiales que los técnicos pueden utilizar para procesar los vehículos viejos utilizando prácticas de gestión ambientalmente racionales.

La SEMARNAT y la EPA trabajarán coordinadamente para difundir la Guía entre los actores relevantes a lo largo de la región fronteriza en el otoño de 2018. La Guía impresa se encuentra disponible en español, mientras que versiones electrónicas en ambos idiomas están disponibles en la página de la EPA.

ED_002319B_00013658-00016

Manejo Integral de Desechos Sólidos y Llantas Usadas en la Frontera México-Estados Unidos

El Programa Frontera 2020 tiene como uno de sus objetivos construir un enfoque más sustentable e integrado para la gestión de materiales de desecho con el fin de minimizar y reducir su impacto en el medio ambiente y mejorar la salud pública. Sin embargo, en una región geográfica donde la población, las condiciones socioeconómicas y las regulaciones ambientales pueden variar significativamente, las diferentes comunidades fronterizas han tenido que adoptar enfoques variados y creativos para construir comunidades sustentables.

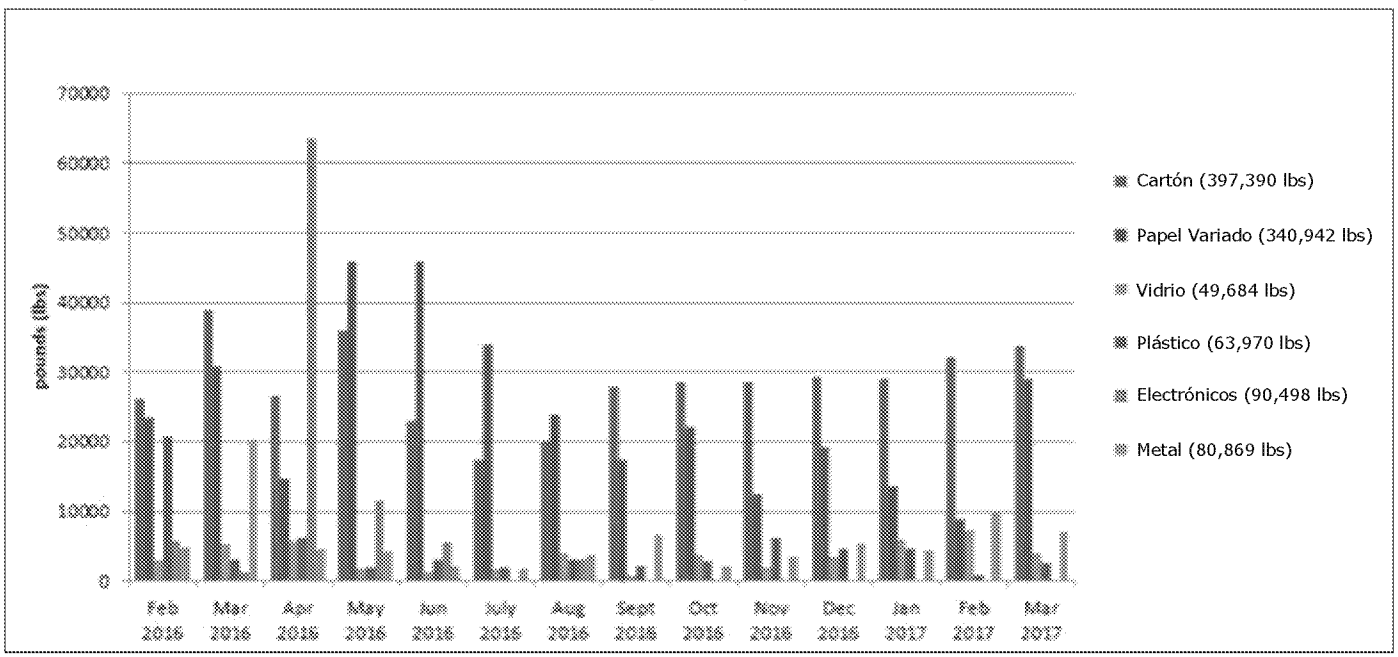
Ciudad de Pharr, Texas

A lo largo de los años, la ciudad de Pharr ha implementado diversas herramientas para la sustentabilidad en el Departamento de Obras Públicas con el objetivo de que esta ciudad sea una de las más limpias en el Valle Bajo Río Bravo. En 2016, Pharr recibió financiamiento por parte del Programa Frontera 2020 por un monto de $36 mil dólares para continuar mejorando sus actividades de reciclaje y educativas en la comunidad con el objetivo de reducir la dependencia de la ciudad en los rellenos sanitarios y construir una comunidad más saludable. Durante un período de 14 meses, la ciudad recolectó:

- Más de 5,700 llantas de desecho;
- 60 toneladas de residuo diversos (Figura 1); y
- 464 toneladas de material reciclado que no fueron depositadas en rellenos sanitarios.

El Departamento de Obras Públicas condujo una campaña de educación pública bilingüe sobre los esfuerzos de reciclaje y sustentabilidad de la ciudad, así como de la contaminación de aguas pluviales y disposición ilegal de llantas usadas, a través de redes sociales, folletos, anuncios de radio y más de 100 actividades informativas (20 reuniones, 40 eventos, 50 presentaciones). El proyecto también fomentó los esfuerzos de reciclaje en algunas escuelas de la ciudad mediante la promoción de un concurso de educación ambiental, así como el suministro de 75 contenedores para el reciclaje en los salones de clase y docenas de contenedores para el reciclaje con una capacidad de 360 litros en el distrito escolar. Para obtener más información sobre el Departamento de Obras Públicas de Pharr y sus esfuerzos, por favor visite su página en internet.

MATERIAL RECOLECTADO Y RECILADO DESVIADO DEL RELLENO SANITARIO DE PHARR, TEXAS. (lbs/mes)



ED_002319B_00013658-00017

Valle Hermoso y Rio Bravo, Tamaulipas

En 2014, el estado de Tamaulipas aprobó la legislación que establece su Programa de Gestión y Prevención Integral de Residuos. Dentro de este programa, basado en factores como el crecimiento de la población y la generación per cápita de los residuos sólidos, el estado priorizó los municipios donde era vital establecer un programa municipal integral para la gestión y prevención de residuos. También se delinearon las estrategias y acciones específicas que estos programas municipales deberían contener, incluidos los costos asociados a su implementación a corto, mediano y largo plazo. La implementación de los programas municipales se realiza en tres fases: llevando a cabo un diagnóstico para conocer las condiciones actuales; la adopción por parte del municipio de su programa; y, finalmente, la implementación, monitoreo y evaluación del programa municipal.

La Secretaría de Desarrollo Urbano y Medio Ambiente de Tamaulipas (SEDUMA) recibió financiamiento por parte del Programa Frontera 2020 por un monto de $20 mil dólares para ayudar a los municipios de Valle Hermoso y Río Bravo a completar su estudio de diagnóstico sobre la gestión local de los residuos. El estudio de diagnóstico, que se llevó a cabo en período de dos meses, analizó:

- Actividades actuales, personal, equipo, desechos sólidos recolectados y clasificación de desechos;
- Estrategias específicas recomendadas para ser implementadas a corto, mediano y largo plazo;
- Costos asociados a la implementación de las estrategias (Tabla 1);
- Parámetros del programa de monitoreo; y
- Posibles mecanismos de financiación.

El 22 de agosto de 2016, SEDUMA presentó a los dos municipios el diagnóstico de su sistema actual para la gestión de residuos. Con base en el diagnóstico, en marzo de 2017 el municipio de Valle Hermoso publicó y registró oficialmente ante autoridades estatales su programa municipal para la gestión integral de residuos, pasando a la tercera fase. Los próximos pasos incluyen la aprobación por parte del municipio de Río Bravo del diagnóstico y el registro de su programa.

COSTOS TOTALES DE IMPLEMENTACIÓN DE ESTRATEGIAS A CORTO, MEDIANO Y LARGO PLAZO EN VALLE HERMOSO Y RIO BRAVO, TAMAULIPAS.

Estrategia Considerada por Municipio	Costo Total de Implementación por Municipio (Dólares)	
	Rio Bravo	Valle Hermoso
Administración/Operación	$4,776,923.00	$1,296,428.00
Reciclaje	$1,648.00	No Considerada / No Aplica
Servicios Generales	No Considerada / No Aplica	$10,989.00
Difusión Pública y Campañas Educativas	$16,373.63	$17,032.00
Participación Sector Privado/ Asociaciones	Sin costo para el Municipio	No Considerada / No Aplica
Creación de Capacidades Institucionales	$155,495.00	$122,527.00
Financiero/Legislativo	Sin costo para el Municipio	No Considerada / No Aplica

ED_002319B_00013658-00018

Atendiendo los Desafíos Binacionales de la Basura Electrónica en Coahuila y Texas

Los rápidos avances en la tecnología y el uso de productos electrónicos por parte de los consumidores hacen que los productos electrónicos se vuelvan obsoletos rápidamente y sean desechados. A diferencia de otros materiales reciclables, los desechos electrónicos (e-waste) no son tan fácilmente reciclables debido a los metales tóxicos que contienen (plomo, mercurio, cadmio y arsénico). El desafío con el reciclaje de desechos electrónicos es a menudo la eliminación inadecuada en los rellenos sanitarios locales y la falta de infraestructura en las comunidades para apoyar el correcto manejo y reciclaje.

Centro de recolección permanente ubicado en las instalaciones del Departamento de Obras Públicas de Eagle Pass, Texas.

En 2016, el Programa Frontera 2020 otorgó financiamiento a dos proyectos, promovidos por la Secretaría de Medio Ambiente del estado de Coahuila (SEMA) y por la organización Green Tecosos, grupo ambientalista del Instituto Tecnológico de Piedras Negras, para el reciclaje de residuos electrónicos en las comunidades de Ciudad Acuña, Piedras Negras y Guerrero, en el estado de Coahuila, e Eagle Pass en Texas. Estos proyectos tuvieron como objetivo evitar que los desechos electrónicos generados en estos municipios fueran vertidos ilegalmente en el lecho del Río Bravo, en los alrededores de la presa La Amistad, así como en arroyos, lotes baldíos y rellenos sanitarios de la región. También proporcionaron información y educaron a la comunidad sobre los beneficios de reutilizar productos electrónicos.

Para mejorar las prácticas sustentables se establecieron 10 centros permanentes de recolección de desechos electrónicos en las cuatro comunidades. A través de eventos comunitarios, los proyectos lograron la recolección de más de 113 toneladas de desechos electrónicos. Además, con la asistencia de más de 60 socios del Programa y a través de talleres, capacitaciones y medios de comunicación; los residentes fueron educados sobre los impactos positivos que el reciclaje adecuado de los desechos electrónicos tiene en el medio ambiente.

EVENTOS COMUNITARIO DE RECOLECCIÓN EN COAHUILA Y TEXAS
FEBRERO, 2016 - MARZO, 2017

Tipo de	*e-waste* Recolectado (tons)	Población Atendida
22 colonias de Piedras Negras	32.22	45,000-50,000
Escuelas de los municipios de Piedras Negras y Nava	8.83	5,500
Negocios y otros	5.56	2,500
Eagle Pass	14.83	28,765

ED_002319B_00013658-00019

La Tribu Campo Band Avanza en las Prácticas Cero Desperdicios

En la región fronteriza, la disposición inadecuada de basura tiene impactos negativos en el medio ambiente que pueden llegar a tener efectos transfronterizos, como el deterioro de la calidad del agua, la obstrucción del flujo de la corriente de los ríos y la creación de hábitats para vectores de enfermedades. En 2015, la tribu Campo Band, ubicada en California, expresó su preocupación a los representantes del Programa Frontera 2020 por los problemas de desechos sólidos transfronterizos. Para atender estas preocupaciones, en el año 2016 el Programa proporcionó financiamiento para realizar una evaluación del flujo de los desechos sólidos y preparar un Plan de Cero Desperdicios. Este Plan tendría como objetivo reducir significativamente el desperdicio y establecer acciones para eventualmente eliminar los desechos enviados al relleno sanitario.

Miembros de la Tribu Campo Band identifican y separan diferentes tipos de residuos.

El Plan de Cero Desperdicios se completó en enero de 2018. Junto con las recomendaciones de este Plan, la tribu Campo Band está explorando activamente otras acciones para la gestión de materiales, incluyendo metas a corto y largo plazo para desarrollar un programa autosustentable de reciclaje y desechos, así como establecer una estación de transferencia. Este Plan fue un importante primer paso o herramienta para que la tribu pudiera alcanzar sus objetivos relacionados con los residuos sólidos y así mejorar la salud de sus miembros y de la región fronteriza en general. La tribu Campo Band continúa aprovechando otros recursos como el Programa de Asistencia General (GAP, por sus siglas en inglés) de la EPA para cumplir sus objetivos sobre desechos sólidos, crear prácticas que tengan sentido para su comunidad y utilizar el plan de cero residuos como una herramienta valiosa para satisfacer sus necesidades. Actualmente, la tribu Campo Band obtuvo $18 mil dólares de financiamiento por parte del GAP para que continúe trabajando con su Plan de Cero Desperdicios.

Miembros de la Tribu Campo Band pesan diferentes tipos de residuos.

ED_002319B_00013658-00020

El Compostaje Desvía Valiosos Materiales Orgánicos de los Rellenos Sanitarios

Donación de composta a participantes del programa Ecoparque.

La composta es un recurso valioso formado por desperdicios de comida, esquejes de jardinería u otro material orgánico. Sin embargo, con base en el estudio de 2018 "Caracterización y Manejo de los Desechos Orgánicos", publicado por la Comisión de Cooperación Ambiental (CCA), los residuos orgánicos en México y los Estados Unidos son depositados principalmente en rellenos sanitarios. El Programa Frontera 2020 ha trabajado para aumentar las tasas de reutilización de los residuos orgánicos, estimadas en 7% para México y 32% para los Estados Unidos, trabajando con socios y actores gubernamentales, académicos, organizaciones sin fines de lucro e industriales para mejorar el manejo de desechos orgánicos a través de prácticas para el composteo y las prácticas "Jerarquía para la recuperación de alimentos" de la EPA.

En el año 2012, el Programa otorgó financiamiento a la organización Tijuana Calidad de Vida que tuvo como resultado la implementación del primer programa piloto fronterizo de composteo municipal, el cual produce composta y educa a futuros compostadores. En el año 2016, el Centro de Finanzas Ambientales de la Oficina Regional 9 de la EPA financió un proyecto para identificar nichos de mercado para la composta en Tijuana que pudieran ser aprovechados por las empresas que necesitaban alcanzar metas de reducción de desechos para sus calificaciones de responsabilidad social corporativa. En 2017, el Colegio de la Frontera Norte (COLEF) condujo un programa piloto que trabajó con casi 120 hogares de Tijuana capacitando a sus integrantes en un total de 27 talleres. Esto dio como resultado la reutilización de 10,067 kg de residuos de comida de sus hogares. La composta generada fue utilizada en Ecoparque, un programa para modelar y enseñar prácticas sustentables y se donaron 107 sacos de composta a los participantes del programa piloto. Los resultados de este programa fueron incluidos en el informe 2018 de la CCA.

El 13 de junio de 2018, el programa *Compost Cats* de la Universidad de Arizona celebró la adjudicación de un financiamiento por $91 mil dólares del Programa para establecer el Centro de Composteo del Condado de Santa Cruz; una alternativa muy necesaria a los rellenos sanitarios. Cerca de 3,000,000 de toneladas de productos cruzan cada año por el cercano cruce fronterizo Mariposa en Nogales, uno de los cruces terrestres más concurridos de la frontera, con destino a los mercados estadounidenses. Alrededor de 8,000 toneladas de residuos se generan anualmente, lo que equivale a dos camiones de volteo por día al año, y son depositados en el relleno sanitario de Rio Rico, por lo que se espera que el Centro de Composteo ofrezca beneficios ambientales y económicos a la región (Comunicado de prensa de la Universidad de Arizona). En su primer año, el Centro de Composteo utilizará 3,000 toneladas de residuos orgánicos creando 6,880 metros cúbicos de composta. Esto equivale a 4.3 campos de fútbol cubiertos con 30 centímetros de composta. El objetivo a largo plazo es utilizar las 8,000 toneladas de residuos generadas anualmente.

El Centro de Composteo se establecerá siguiendo el exitoso programa "Compost Cats" de la Universidad de Arizona en Tucson, que no sólo genera composta, sino que también trabaja con los bancos de alimentos locales para donar los sobrantes de comida del campus para alimentar a indigentes. En 2015, el trabajo de este programa fue reconocido con el premio "*Food Recovery Challenge*" de la EPA por reducir el desperdicio de alimentos en el campus principal de la Universidad de Arizona y en la ciudad de Tucson. El Centro de Composteo también servirá como un centro de aprendizaje agrícola para estudiantes de secundaria y universitarios, evitando que este valioso recurso sea depositado en rellenos sanitarios.

ED_002319B_00013658-00021

FORTALECIENDO LA PREPARACIÓN Y RESPUESTA A EMERGENCIAS

Reconociendo que los incidentes que involucran químicos peligrosos y otras emergencias ambientales, independientemente de la frontera internacional, pueden amenazar a las comunidades locales y binacionales, México y los Estados Unidos continúan trabajando juntos para mejorar la preparación y la respuesta a emergencias internacionales. El Programa Frontera 2020 y sus Socios apoyan actividades para la capacitación binacional, ejercicios conjuntos, así como la actualización de los equipos esenciales y de los planes conjuntos de emergencia lo que ha incrementado las capacidades de comunicación y respuesta. Juntos, hemos reducido la magnitud de los incidentes y mejorado la seguridad en la región fronteriza.

La Capacitación Binacional Reduce el Peligro y los Impactos Negativos en las Comunidades Fronterizas

Mediante la coordinación con agencias federales, estatales y locales de ambos países, el Programa Frontera 2020 ha organizado ejercicios y actividades de capacitación conjunta, y ha tomado las medidas necesarias para garantizar que los socorristas cuenten con el equipo de protección personal adecuado para responder de manera segura y efectiva a incidentes. Desde el inicio del Programa, más de 10,500 bomberos, brigadistas para la atención de emergencias, policías, militares, representantes de la industria, personal médico y otros líderes comunitarios relevantes han recibido capacitación a través de: 153 cursos de capacitación, 32 ejercicios binacionales y 245 ejercicios de notificación entre México y los Estados Unidos en la región fronteriza de Sonora-Arizona y Baja California-California.

"Gracias a la EPA, así como a los bomberos de la ciudad de Douglas, Arizona, que han participado como instructores, por enriquecer nuestro conocimiento HAZMAT. Gracias a esto estamos preparados para cualquier emergencia. Nuestro objetivo es proteger a la comunidad de nuestras ciudades hermanas. Gracias a la EPA por proporcionarnos el equipo ya que, debido a su alto costo, está fuera de nuestro alcance. Gracias por confiar y creer en los bomberos de Agua Prieta."

Teniente José Romero
H. Cuerpo de Bomberos de Agua Prieta

Bomberos de ambos países combaten el incendio de Diciembre.

Conseguir que personal y equipo crucen la frontera de manera oportuna para ayudar a responder a emergencias siempre ha sido un desafío que requiere de un esfuerzo coordinado entre una amplia gama de agencias y organizaciones. Las actividades de capacitación y los ejercicios binacionales con socorristas, funcionarios de aduanas, distintas agencias gubernamentales, militares, industria y el público en general; han sentado las bases para una respuesta eficiente a situaciones reales de emergencia.

Respuesta Binacional a un Incendio en el Invierno de 2017

Cuando un gran incendio de llantas produjo peligrosas nubes de humo en Agua Prieta, Sonora, que se desplazaron hacia Douglas, Arizona, en diciembre de 2017, los bomberos de Douglas cruzaron la frontera y ayudaron a apagarlo en cuatro

ED_002319B_00013658-00022

Participantes del taller de capacitación en HAZMAT Tech.

horas. La capacitación binacional y los ejercicios en campo, realizados cuatro meses antes del incendio, ayudaron enormemente a aumentar la eficiencia de la respuesta así como a reducir la escala y el impacto del incidente. Además, la Patrulla Fronteriza destacada en el cruce fronterizo entre ambas comunidades permitió el paso oportuno a los bomberos.

La colaboración binacional, con el apoyo de los bomberos de Douglas, evitó que el fuego creciera y potencialmente cruzara a los Estados Unidos y se redujo la cantidad de humo, el cual puede causar problemas respiratorios a poblaciones sensibles como niños, ancianos y asmáticos en esas localidades de la región fronteriza.

Capacitación Puesta a Prueba por Incendio de Llantas

Un taller de capacitación en HAZMAT *Tech*, con duración de 200 horas, para los bomberos de Douglas y Agua Prieta se está impartiendo los fines de semana y terminará en el otoño de 2018. Como resultado, se tendrán más bomberos capacitados en HAZMAT en Douglas y se formará un equipo completo de HAZMAT en Agua Prieta. Este taller permitirá a los cuerpos de bomberos de estas localidades fronterizas estar mejor entrenados y equipados para responder a incidentes y apoyarse mutuamente en la atención de emergencias.

El 26 de mayo el taller de capacitación tuvo que ser interrumpido y pospuesto debido a la necesidad de atender un llamado de emergencia originado por un incendio en un tiradero de llantas de desecho en Agua Prieta. Se activó y utilizó el Plan de Emergencia Binacional para las Ciudades Hermanas Agua Prieta-Douglas, el cual había sido actualizado recientemente, para atender la emergencia. Con el apoyo del Departamento de Bomberos de Douglas, el incendio fue controlado en menos de tres horas.

Gerardo Romo, miembro del Departamento de Bomberos de Douglas comentó: "Gracias a los esfuerzos binacionales y la capacitación en HAZMAT proporcionada a los bomberos de Agua Prieta, tuvieron la capacidad de responder a los incidentes de una manera más rápida y eficiente. En el pasado, el Departamento de Bomberos de Agua Prieta atendió voluntariamente las emergencias de incendios dando su mejor esfuerzo; sin embargo, ahora que están recibiendo el entrenamiento HAZMAT por parte del Departamento de Bomberos de Douglas, entienden la necesidad de contar con un equipo de protección personal adecuado para responder y enfrentar el riesgo de cada evento, como los incendios de llantas. Personalmente, vi a los bomberos usar el equipo de protección respiratoria adecuadamente durante el incendio de llantas que ocurrió el 26 de mayo."

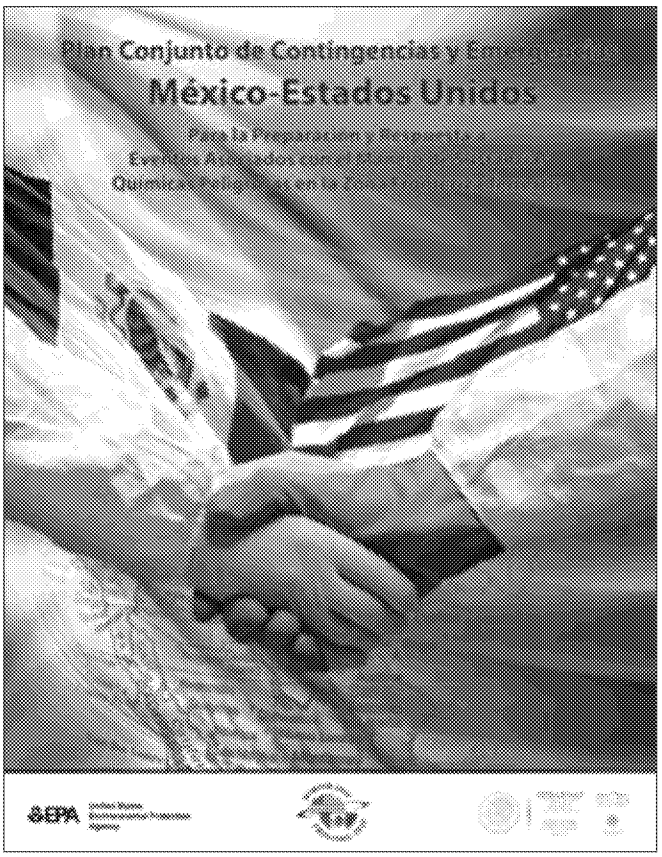
ED_002319B_00013658-00023

Mejora la Preparación Conjunta para la Respuesta a Emergencias Ambientales en el Marco del Programa Frontera 2020

Las emergencias químicas y de otras sustancias peligrosas no respetan las fronteras internacionales por lo que mantener una adecuada preparación para atender una posible emergencia en la región fronteriza es esencial para mejorar la capacidad de respuesta a incidentes, protegiendo al medio ambiente y a la población de sus impactos.

El Anexo II del Acuerdo de La Paz de 1983 estableció el Plan Conjunto de Contingencias (PCC), el cual proporciona un mecanismo de coordinación binacional para proteger la salud humana y el medio ambiente, así como la respuesta a contingencias químicas o petrolíferas significativas o emergencias que afecten la región fronteriza entre México y los Estados Unidos. Atendiendo este compromiso, dos versiones anteriores del PCC han sido revisadas y actualizadas, resaltando que el 17 de noviembre de 2017, en la Ciudad de México, la última actualización del PCC fue firmado por la Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), a través de la Procuraduría Federal de Protección al Ambiente (PROFEPA), y por la Coordinación Nacional de Protección Civil de la Secretaría de Gobernación (SEGOB). Previamente, en representación de los Estados Unidos, la Oficina de Gestión de Emergencias (OEM) de la EPA firmó la actualización del PCC.

El PCC actualizado establece un sólido sistema de notificación binacional que ha sido reestructurado para reflejar las lecciones aprendidas de las emergencias reales y los simulacros de notificación. Los cambios al sistema de notificación fueron coordinados con el Centro Nacional de Respuesta (NRC) de los Estados Unidos, el Centro Nacional de Comunicaciones/Sistema Nacional de Protección Civil (CENACOM) de México y la PROFEPA, así como con las Oficinas Regionales 6 y 9 de la EPA. Expertos en normatividad de la Oficina del Asesor Jurídico General, la Oficina de Derecho Internacional y la Oficina de Asuntos Internacionales y Tribales de la EPA, así como del Departamento de Estado de los Estados Unidos realizaron revisiones exhaustivas a estos cambios.



Portada del Plan Conjunto de Contingencias.

La capacidad de planificar y prepararse binacionalmente mejora la probabilidad de responder adecuadamente a los incidentes y proteger el medio ambiente y a la población de la exposición a contaminantes dañinos y de posibles impactos ambientales o en la salud. Esta asociación binacional también está aumentando la capacidad de respuesta a emergencias mediante eventos de capacitación diseñados para mejorar la cooperación, fortalecer los planes de contingencia binacionales a nivel local, tribal, estatal, regional y nacional, así como para reducir los riesgos de emergencias y desastres en toda la región fronteriza.

ED_002319B_00013658-00024

FOMENTANDO UNA GESTIÓN AMBIENTAL RESPONSABLE

La frontera entre México y los Estados Unidos es una región económica vibrante con un movimiento transfronterizo diario de una gran variedad de bienes de consumo y materiales peligrosos destinados a reciclaje o eliminación. Cuando no son manejados adecuadamente, los materiales peligrosos representan una amenaza inmediata para la salud ambiental transfronteriza. En respuesta, autoridades federales, estatales y locales de ambos países se asocian para vigilar los movimientos fronterizos en ambas direcciones, proporcionar asistencia para el cumplimiento de leyes y mejorar el acceso a la información sobre posibles fuentes industriales de sustancias tóxicas a través de actividades de capacitación y talleres. Estas acciones aumentan el cumplimiento transfronterizo de las normas vigentes, fomentan la gestión ambiental responsable y reducen los riesgos que plantean los desechos y materiales peligrosos.

Reforma Legislativa y Educación Ambiental en Nuevo Laredo

La Universidad Autónoma de Tamaulipas recibió financiamiento por parte del Programa Frontera 2020 para continuar educando a las comunidades fronterizas sobre los desafíos ambientales (en temas como: contaminación del agua, desechos sólidos urbanos, grasas, aceites) que persisten en esta región. El proyecto se enfocó en los siguientes objetivos:

Página de internet de la UAT con los documentos genéricos de las normas ambientales que pueden ser adaptadas por los Municipios de los estados de Tamaulipas y Nuevo León.

- Capacitar a estudiantes de escuelas públicas y a inspectores ambientales acerca de los retos ambientales más comunes en la localidad.
- Desarrollar propuestas para actualizar la legislación municipal de Nuevo Laredo.
- Crear una base de datos disponible en internet con toda la reglamentación ambiental de los municipios que componen la región fronteriza del estado de Tamaulipas.

El proyecto permitió la capacitación en temas de conservación ambiental para más de 2,300 estudiantes, 50 directores de escuelas públicas y 20 inspectores ambientales de la ciudad de Nuevo Laredo. Adicionalmente, el proyecto ayudó en el desarrollo y entrega a autoridades municipales de la propuesta de ley para el "Ordenamiento Ecológico Territorial del Municipio de Nuevo Laredo, Tamaulipas". Finalmente, los municipios de Ciudad Mier, Camargo, Jiménez y Jaumave, Tamaulipas, también adoptaron leyes de ordenamiento ecológico territorial que beneficiarán aproximadamente a 300,000 residentes.

ED_002319B_00013658-00025

Los Inspectores de los Cruces Internacionales Protegen a las Comunidades Fronterizas

La aplicación de las normas de importación/exportación establecidas por la Ley de Conservación y Recuperación de Recursos de los Estados Unidos (RCRA, por sus siglas en inglés) protege la salud pública y el medio ambiente al proporcionar salvaguardias para prevenir el manejo inadecuado y derrame de residuos y materiales peligrosos. También reduce las actividades binacionales de empresas fraudulentas que implementan prácticas ilegales, creando una competencia comercial desleal. La EPA otorga financiamiento al Departamento de Sustancias Tóxicas de California (DTSC, por sus siglas en inglés), un socio del Programa Frontera 2020, para proteger la frontera entre México y los Estados Unidos.

Los inspectores del DTSC y del Condado de San Diego trabajan en estrecha colaboración con la Oficina de Aduanas y la Patrulla Fronteriza de los Estados Unidos (CBP, por sus siglas en inglés) para vigilar y garantizar el cumplimiento de las normas vigentes para garantizar que los materiales peligrosos y los productos de desecho se transporten de manera segura a través de los cruces fronterizos hacia sus destinos finales en ambos países. Estos inspectores, capacitados en el procedimiento HAZMAT, forman parte del equipo de respuesta de emergencia, una primera línea de defensa en caso de un derrame o accidente peligroso en el cruce fronterizo. Los inspectores del DTSC y del Condado de San Diego, a solicitud de CBP, también participan en operaciones especiales, como inspecciones de carga fuera de días y horas permitidas para transportar materiales peligrosos. Para reforzar el cumplimiento de las normas vigentes, México y los Estados Unidos brindan asistencia técnica y capacitación para facilitar que las industrias de ambos países comprendan los requisitos reglamentarios vigentes.

El 20 de junio de 2018, con fondos otorgados por el Programa Frontera 2020 y el programa RCRA, el DTSC organizó, en coordinación con la SEMARNAT, la PROFEPA y la Secretaría de Protección Ambiental del Estado de Baja California (SPA); un taller en la ciudad de Tijuana sobre las normas y requisitos para la importación/exportación, dirigido a las empresas e industrias mexicanas generadoras de residuos peligrosos y residuos especiales que operan en Baja California. El taller se centró en los requisitos para la importación/exportación incluyendo: transporte, el nuevo sistema electrónico de manifiesto y verificación, la definición de residuos y materiales peligrosos, así como resaltando las diferencias entre los requisitos federales

Asistentes al taller sobre requisitos para la importación/exportación celebrado en Tijuana.

y estatales. Asistieron casi 200 personas de los sectores industrial, gubernamental y académico, lo que demuestra la demanda que existe por este tipo de información y la voluntad de la industria en cumplir con las normas.

Con base en el último informe del Mecanismo Consultivo México-Estados Unidos, la SEMARNAT autorizó a 33 empresas mexicanas a tratar, almacenar o eliminar los desechos peligrosos generados por los cientos de negocios en la región fronteriza. Ofrecer este tipo de talleres de capacitación en Tijuana ayuda a la industria e informa a las partes interesadas clave sobre los requisitos para el cumplimiento de las regulaciones de los Estados Unidos ayudando, en última instancia, a proteger la salud pública y el medio ambiente.

ED_002319B_00013658-00026

PROTEGIENDO LA SALUD AMBIENTAL

La salud ambiental se enfoca en analizar cómo el entorno natural y el ambiente construido afectan a la salud humana y cómo se pueden gestionar para mejorar la calidad de vida. Nuestras poblaciones más vulnerables, como los niños, los ancianos y las personas con problemas respiratorios, a menudo son las más afectadas por la combinación de la mala calidad del aire interior y exterior, el agua contaminada, los residuos no gestionados y otras condiciones ambientales. El Programa Frontera 2020 y sus Socios han apoyado conferencias binacionales de salud ambiental, actividades para la capacitación de capacitadores de promotoras (trabajadoras comunitarias de la salud), aplicaciones de mapeo interactivo para identificar retos ambientales así como la implementación de soluciones y estrategias de comunicación clave para mejorar la salud pública en la región fronteriza entre México y los Estados Unidos.

Trabajando en Equipo para Atender la Enfermedad de *Zika* en Brownsville

En 2016, el brote de *Zika* en los Estados Unidos surgió como una amenaza significativa para la población. En noviembre de ese año, la ciudad de Brownsville, Texas, informó sobre el primer caso del virus *Zika* transmitido por un mosquito en el estado. La ciudad trabajó en coordinación con el Centro para el Control de Enfermedades (CDC, por sus siglas en inglés), el Departamento Estatal de Servicios de Salud de Texas (TDSHS, por sus siglas en inglés), el Condado de Cameron y el Departamento de Salud de Brownsville para obtener más información sobre la transmisión y las precauciones que debe tomar la población.

En 2017, la EPA se asoció con el Departamento de Salud de Brownsville para identificar las áreas de riesgo y los factores que llevaron a la diseminación del mosquito *aedes aegypti*. El proyecto se desarrolló bajo un enfoque holístico para identificar las condiciones subyacentes que permiten la cría de mosquitos y cómo prevenirla. Gracias al análisis de los datos ambientales existentes junto con los datos socioeconómicos y la información disponible sobre este mosquito, fue posible crear un mapa de las áreas de riesgo dentro de la ciudad. A la fecha, la ciudad está utilizando una aplicación con una plataforma de colaboración abierta en la que los residentes puedan informar sitios potenciales para la reproducción de mosquitos y cargar fotos georreferenciadas. El sitio web también proporciona acciones recomendadas que las personas pueden implementar para combatir los riesgos que representan los mosquitos.

El Departamento de Salud de la ciudad de Brownsville también está trabajando con las Promotoras, que sirven como enlaces comunitarios públicos, para educar a los residentes a través de un modelo de "capacitación de capacitadores". El proyecto está en curso y los investigadores de la EPA presentaron sus hallazgos iniciales en una conferencia y recientemente publicaron los resultados.

> *"Combinamos datos ambientales (cobertura terrestre, precipitación y temperatura) con datos socioeconómicos y de la actividad de mosquitos con el fin de obtener una imagen más precisa del riesgo. Por lo que sabemos, este es el primer estudio de mitigación de vectores que tiene en cuenta tanto los datos de la cobertura terrestre de 1x1 metros como de los determinantes socioeconómicos."*

Dr. Pai-Yei Whung
Líder del proyecto e
Investigador Titular del la EPA

ED_002319B_00013658-00027

La EPA Trabaja con las Comunidades para Atender la Salud Ambiental Infantil

Jacobo Sandoval durante un evento comunitario de difusión en Nogales, Arizona.

> *"Las familias en Nogales, Arizona, están muy contentas con la evaluación de hogares saludables y especialmente con las alarmas de humo instaladas por el Instituto Sonora de Investigación Ambiental (SERI). Muchas familias mencionaron que en Nogales no existen muchos programas de salud ambiental infantil disponibles para las familias de bajos ingresos, y están agradecidas por la oportunidad de participar en el programa."*
>
> **Jacobo Sandoval**
> **Gerente del Programa SERI**

Según la Organización Mundial de la Salud, en el año 2012 se estimó que 1.7 millones de niños menores de cinco años murieron debido a factores ambientales. Los niños que viven en la región fronteriza entre México y los Estados Unidos son particularmente vulnerables debido a que la región tiene las tasas promedio más altas de niños que viven en la pobreza, no cuentan seguro médico y padecen de enfermedades crónicas (Organización Panamericana de la Salud, 2014).

En los últimos años, la asociación entre la Oficina de Salud Ambiental Infantil de la EPA, el Programa Frontera 2020, la sección estadounidense de la Comisión México-Estados Unidos de Salud Fronteriza, que depende del Departamento de Salud y Servicios Humanos de los Estados Unidos, y organizaciones civiles locales han trabajado en proyectos colaborativos para identificar las necesidades de salud y brindar oportunidades de acción

ED_002319B_00013658-00028

local con el objetivo de mejorar las vidas de los niños que viven a lo largo de la frontera entre México y los Estados Unidos. Estas acciones incluyeron la organización de tres simposios de salud infantil desde el sur de Texas hasta California, así como subsidios federales para educar a las familias, a trabajadoras comunitarias de la salud, a maestros y a profesionales médicos sobre cómo abordar las necesidades de salud de los niños.

En el año 2018, la EPA otorgó más de $214 mil dólares para financiar cinco proyectos destinados a atender la salud ambiental de los niños en las comunidades fronterizas de Texas, Nuevo México y Arizona. Estos cinco proyectos abordaron temáticas de salud ambiental relacionadas con la pintura a base de plomo, la calidad del aire interior y el manejo integral de plagas.

Muchos de estos proyectos están estableciendo nuevas formas para mejorar los programas e iniciativas actuales de salud ambiental de las agencias que trabajan al interior de las comunidades ubicadas en la región fronteriza. Estos proyectos capacitarán a cerca de 350 especialistas, incluyendo a trabajadoras comunitarias de la salud, proveedores de cuidado infantil y médicos; e informarán a más de 2,000 miembros de las comunidades sobre temas de salud ambiental tales como: mejorar la calidad del aire interior, reducir la exposición a pintura a base de plomo e implementar estrategias integrales para el control de plagas. A través de estos proyectos, y el continuo liderazgo de las comunidades fronterizas, la salud ambiental de los niños continuará mejorando.

"Las enfermedades crónicas como el asma, padecimientos cardiovasculares y la diabetes están relacionadas con la contaminación del aire. Proporcionaremos educación sobre una variedad de riesgos ambientales a las Promotoras, a los padres de niños que asisten a primarias y secundarias así como a las mujeres embarazadas. Esta educación proporcionará a los participantes el conocimiento necesario para identificar los contaminantes interiores y exteriores, los químicos dañinos contenidos en los pesticidas utilizados en el hogar y cómo pueden cambiarlos o controlarlos sin exponer a sus hijos a sus efectos nocivos."

Dra. Genny Carrillo
Escuela de Salud Pública
Universidad de Texas A&M

"El Centro de Salud Comunitario Mariposa se complace en haber recibido este financiamiento. Proteger a nuestros hijos garantizando un entorno de vida saludable es esencial para su salud y bienestar a largo plazo. Estos fondos proporcionarán capacitación para trabajadoras comunitarias de la salud a lo largo de la frontera entre México y los Estados Unidos con el objetivo de ayudarlos a identificar contaminantes ambientales, así como capacitar a las mamás y papás en los métodos apropiados para reducir o eliminar la exposición a estos contaminantes dentro de sus hogares."

Ed Sicurello
Director Ejecutivo
Centro de Salud Comunitario Mariposa

"El Centro del Suroeste para la Salud Ambiental Pediátrica se complace en enterarse de que se nos ha otorgado este financiamiento. Servirá para aumentar la atención de los niños desfavorecidos en la región fronteriza entre El Paso y Brownsville. Trabajando desde el Centro de Ciencias de la Salud de la Universidad Texas Tech en El Paso, nos hemos asociado con colegas de la Facultad de Medicina de la Universidad de Texas en el Valle del Río Bravo para ampliar nuestra zona de trabajo. Los fondos se destinarán a la organización de dos talleres y el desarrollo de guías de capacitación para la Promotoras. Asimismo, apoyará el desarrollo de módulos de enseñanza electrónicos que serán utilizados en la materia optativa para estudiantes de medicina sobre salud ambiental pediátrica de estas universidades."

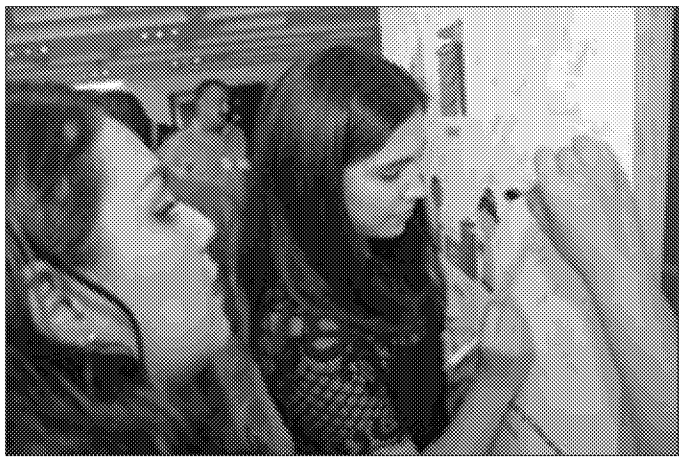
Director Stephen Borron, M.D.
Centro del Suroeste para la
Salud Ambiental pediátrica

ED_002319B_00013658-00029

Atendiendo la Amenaza del *Zika* en la Frontera

Además de los ecosistemas compartidos por México y los Estados Unidos en la región fronteriza, el Programa Frontera 2020 también reconoce que "[el] movimiento de personas y productos entre los dos países crea un ambiente binacional único para prevenir y controlar enfermedades propagadas a través de alimentos y agua, de insectos o animales, y entre personas" (Centro para el Control de Enfermedades, 2018). En respuesta a estos riesgos, el Programa ha apoyado los esfuerzos para aumentar la concienciación y proporcionar capacitación sobre el uso del manejo integrado de plagas, así como para prevenir la propagación de enfermedades transmitidas por vectores, como el *Zika* que es transmitido por mosquitos.

En el otoño de 2016, dos conferencias binacionales de salud ambiental sobre enfermedades transmitidas por vectores se llevaron a cabo en Mexicali, Baja California, y Nogales, Sonora. Participaron la Universidad Autónoma de Baja California (UABC), el Instituto Técnico de Nogales (ITN), El Colegio de la Frontera Norte (COLEF), el Centro para el Control de Enfermedades (CDC, por sus siglas en inglés) de los Estados Unidos y su contraparte mexicana, El Centro Nacional de Programas Preventivos y Control de Enfermedades (CENAPRECE), entre otros. Asistieron más de 360 personas, entre los que se encontraban estudiantes de medicina, profesores, profesionales de la salud, funcionarios gubernamentales y 30 expertos en enfermedades transmitidas por vectores. Los temas clave incluyeron: medidas preventivas para combatir el *Zika* y otras enfermedades transmitidas por vectores, estrategias integradas para el control de plagas y el uso apropiado de repelentes de insectos.



Participantes de una de las conferencias se comprometen a eliminar las fuentes de vectores manteniendo sus hogares y el medio ambiente limpios y libres de basura y agua estancada.

En 2017, para confirmar el impacto a largo plazo de los eventos, los organizadores y anfitriones de las conferencias (UABC e ITN) contactaron a los asistentes y llevaron a cabo una evaluación, aprendiendo tres conclusiones clave:

- Después de su participación en las conferencias, tres de cada cuatro encuestados compartieron la información ambiental y de salud pública que aprendieron con sus conocidos.
- Más de la mitad de los encuestados informaron que ahora leen la etiqueta de los productos antes de usar repelentes de insectos.
- De importancia crítica, casi la mitad de los asistentes han comenzado a vaciar el agua estancada en macetas para eliminar los huevos de los mosquitos, lo que reduce sus hábitats de reproducción.

De acuerdo con los resultados de esta evaluación, es posible afirmar que las conferencias aumentaron el conocimiento y el comportamiento de los asistentes. Para obtener más información sobre estos eventos, visite la página de internet del Programa Frontera 2020 de la EPA.

ED_002319B_00013658-00030

COMITÉ DE COMUNICACIÓN

Coordinadores Generales

Armando Yáñez Sandoval
SEMARNAT
Ciudad de México

Lisa Almodovar
U.S. EPA, Oficinas Centrales
Washington, D.C.

Miembros

Tadzio Clavel Herrera
SEMARNAT
Ciudad de México
tadzio.clavel@semarnat.gob.mx

Miguel Fragoso Romero
SEMARNAT
Ciudad de México
miguel.fragoso@semarnat.gob.mx

Marta Jordan
U.S. EPA Oficinas Centrales
Washington, D.C.
Jordan.Marta@epa.gov

Maria Sisneros
U.S. EPA Región 6
El Paso, Texas
sisneros.maria@epa.gov

Jessica Helgesen
U.S. EPA Región 9
San Diego, California
helgesen.jessica@epa.gov

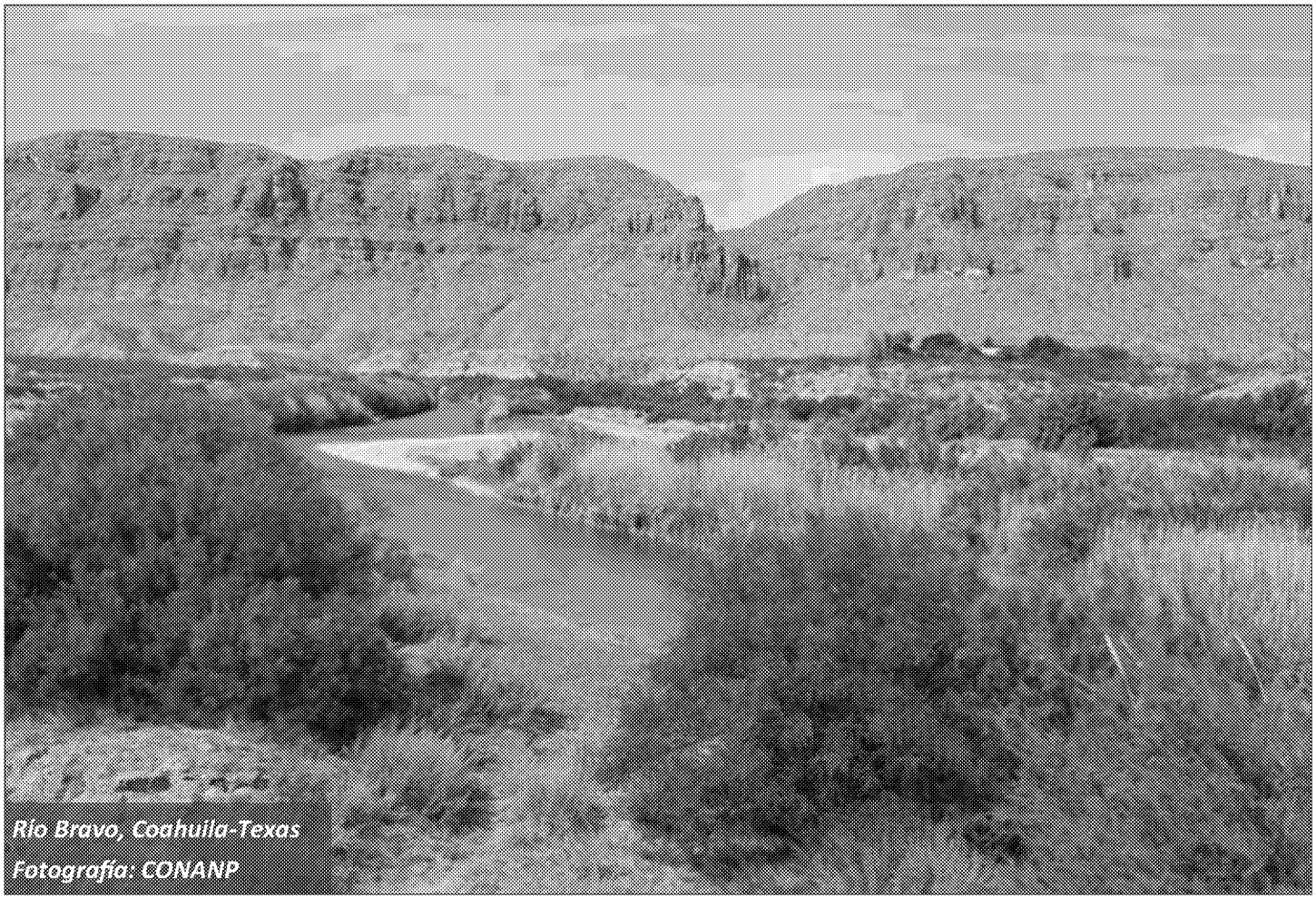
ED_002319B_00013658-00031

¡Visit our web pages!
www.epa.gov/border2020
www.gob.mx/semarnat

MISSION STATEMENT

As a result of the partnership among U.S. Border Tribes and federal, state and local governments in the United States and Mexico, the mission of the Border 2020 Program is to:

Protect the environment and public health in the U.S.-Mexico border region, consistent with the principles of sustainable development.



Río Bravo, Coahuila-Texas
Fotografía: CONANP

The following organizations received grants:

Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C. – Received $50,000 for sustainable and resilience housing

Subsecretaria de Medio Ambiente, Tamaulipas – Received $20,866 to strengthen solid waste programs

Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza – Received $16,777 for electronic waste recycling

City of Harlingen Fire Department – Received $60,000 to support binational tabletop exercises

Instituto Tecnológico de Ciudad Juárez – Received $43,204 for a green infrastructure and sustainability project

Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología – Received $41,388 for a soil conservation and management project

Secretaría de Desarrollo Urbano y Medio Ambiente, Tamaluipas – Received $9,385 for energy efficient lighting

Texas A&M University-Kingsville – Received $38,885 for storm water improvements

Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras – Received $36,054 for electronic waste recycling

The University of Texas at Austin – Received $58,575 for a water quality improvement initiative

Brownsville Public Utilities Board – Received $25,000 for an educational campaign to help eliminate water discharges

Junta de Aguas y Drenaje de Matamoros - Received $25,000 for an educational campaign to help eliminate water discharges

City of Pharr, Recycling Center- Received $36,390 for a green campaign

Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo – Received $11,000 for Environmental Education and Legislative action reforms

United States
Environmental Protection
Agency

EPA Awards More Than $521,000 for Environmental Projects along the U.S.-Mexico Border

Dallas– As in previous years, the U.S. Environmental Protection Agency's Border 2020 program has awarded more than 521,000 in grants to fund 14 environmental projects, and continue to make strides in conservation and sustainability along the U.S. - Mexico border region. These projects will make a difference and demonstrate innovative solutions to improve lives of our border residents in our border communities.

The funds were awarded in partnership with the Border Environment Cooperation Commission (BECC), under the bi-national U.S.-Mexico Environmental Program: Border 2020. The fourteen projects selected address the public health and environmental protection goals of the Border 2020 Program and are part of the overall environmental funding available to the border region. Additionally, recipient organizations will match with funds over $589,000

The following organizations received grants:

Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C. – Received $50,000.00, for Sustainable and Resilience housing at Juarez's underserved communities

Subsecretaria de Medio Ambiente, Tamaulipas–Received $20,866.00, to strengthen communities' Solid Waste Programs,

Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza – Received $16,777.20 for recycling management and a comprehensive collection system of electronic waste,

City of Harlingen Fire Department – Received $ 60,000 in support of binational tabletop and functional exercise between Harlingen and Matamoros cities,

Instituto Tecnológico de Ciudad Juárez – Received $ 43,204.00, for Green Infrastructure and sustainability at public open space in Ciudad Juarez,

Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología – Received $ 41,388.54 for abatement of wind soil erosion through soil conservation and management practices at range lands in Chihuahua Border livestock lands

Secretaría de Desarrollo Urbano y Medio Ambiente, Tamaluipas – Received $ 9,385.00 for streets lighting energy efficient network in Tamaulipas,

Texas A&M University-Kingsville – Received $38,885.00 for Decision making tool for determining LID Storm water detention

Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras – Received $36,054.00 for a comprehensive recycling management system on collection of electronic waste,

The University of Texas at Austin – Received $58,575.00 for a Rio Grande / Rio Bravo water quality initiative,

Brownsville Public Utilities Board – along with Junta de Aguas y Drenaje de Matamoros, Received $25,000.00 each, for Fat, oil, and grease public outreach educational campaign that control water discharge contamination,

City of Pharr, Recycling Center- Received $36,390.00 for a public Lets Clean it up and Green it up campaign,

Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo – Received $11,000.00 for an Environmental Education and Legislative action reforms,

United States
Environmental Protection
Agency

EPA Awards More Than $521,000 for Environmental Projects along the U.S.-Mexico Border

Dallas– As in previous years, the U.S. Environmental Protection Agency's Border 2020 program has awarded more than 521,000 in grants to fund 14 environmental projects, and continue to make strides in conservation and sustainability along the U.S. - Mexico border region. These projects will make a difference and demonstrate innovative solutions to improve lives of our border residents in our border communities.

The funds were awarded in partnership with the Border Environment Cooperation Commission (BECC), under the bi-national U.S.-Mexico Environmental Program: Border 2020. The fourteen projects selected address the public health and environmental protection goals of the Border 2020 Program and are part of the overall environmental funding available to the border region. Additionally, recipient organizations will match with funds over $589,000

The following organizations received grants:

Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C. – Received $50,000.00, for Sustainable and Resilience housing at Juarez's underserved communities

Subsecretaria de Medio Ambiente, Tamaulipas–Received $20,866.00, to strengthen communities' Solid Waste Programs,

Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza – Received $16,777.20 for recycling management and a comprehensive collection system of electronic waste,

City of Harlingen Fire Department – Received $ 60,000 in support of binational tabletop and functional exercise between Harlingen and Matamoros cities,

Instituto Tecnológico de Ciudad Juárez – Received $ 43,204.00, for Green Infrastructure and sustainability at public open space in Ciudad Juarez,

Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología – Received $ 41,388.54 for abatement of wind soil erosion through soil conservation and management practices at range lands in Chihuahua Border livestock lands

Secretaría de Desarrollo Urbano y Medio Ambiente, Tamaluipas – Received $ 9,385.00 for streets lighting energy efficient network in Tamaulipas,

Texas A&M University-Kingsville – Received $38,885.00 for Decision making tool for determining LID Storm water detention

Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras – Received $36,054.00 for a comprehensive recycling management system on collection of electronic waste,

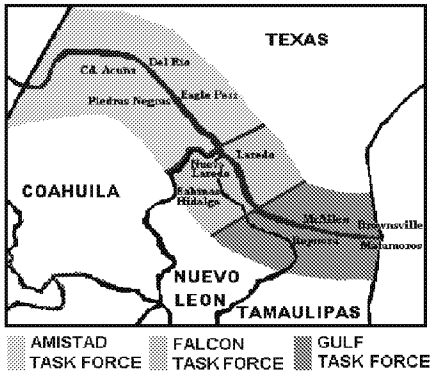
The University of Texas at Austin – Received $58,575.00 for a Rio Grande / Rio Bravo water quality initiative,

Brownsville Public Utilities Board – along with Junta de Aguas y Drenaje de Matamoros, Received $25,000.00 each, for Fat, oil, and grease public outreach educational campaign that control water discharge contamination,

City of Pharr, Recycling Center- Received $36,390.00 for a public Lets Clean it up and Green it up campaign,

Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo – Received $11,000.00 for an Environmental Education and Legislative action reforms,

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup
December 2016



The Four-State Regional Workgroup is the most complex of the four regional workgroups because of its geographical extension and the number of municipalities. The region includes parts of three states and at least 29 municipalities on the Mexican side and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf--each of which established subject-specific committees related to its priority concerns.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

During the first half of 2015 the three task forces held meetings to discuss initial priorities for the 2015-2016 Action Plan. Leaders held several conference calls in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side
    c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal

4. Assist communities to build capacity for waste streams by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets

5. Expand environmental education related to waste issues

ED_002319B_00013752-00001

6. Enhance joint preparedness for environmental response
    a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills
    b. Coordinate emergency preparedness response table top or field exercises.

7. Develop a certified environmental health curriculum to train border community health workers and promotoras on pesticides and lead, mercury, and other heavy metals

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitor drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalize the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets (such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop an assessment on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias
5. Healthy Homes training for promotoras along the Gulf Task Force U.S. - MX border

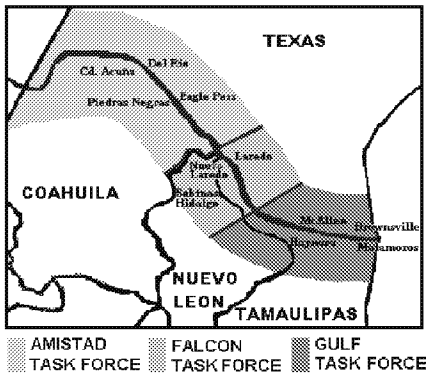
ED_002319B_00013752-00002

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures.							
1.1.01	**Characterization of Drayage Activities & Emissions Laredo-Nuevo Laredo Airshed** Develop a detailed characterization of the drayage activity in the Laredo-Nuevo Laredo region and its air quality implications.	Texas A&M Transportation Institute	$89,750	Border 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Gather activity information on drayage vehicles to estimate their emissions impacts in the Laredo and Nuevo Laredo airshed.	The study indicated that the World Trade Bridge had a high concentration of particulate matter due to idling by trucks when waiting to cross customs and that slower speed and their movement were factors that coincided with high particulate matter at the bridge and in urban areas, based on their destination. TTI organized an

ED_002319B_00013752-00003

							October 2015 workshop to share the findings. The study is complete.
1.1.02	**Emissions from Long Haul Mexican Diesel Trucks in Laredo-San Antonio Corridor** Survey diesel truck activity and evaluate typical Mexican diesel truck emissions along Laredo-San Antonio Corridor.	Texas A&M Transportation Institute	$100,000	EPA, TCEQ	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Collecting and analyzing data. TTI presented findings and reported in August 2015.	Mobile diesel emissions are expected to be a significant contribution to the emissions inventory of the Eagle Ford and San Antonio areas. In 2014-2015 the TCEQ managed a project with the Texas A&M Transportation Institute to survey current volume and anticipate increases of long-haul Mexican diesel traffic in the IH-35 corridor between Laredo and San Antonio. The project findings helped planning to maintain air quality in San Antonio in the face of increasing diesel truck traffic. TTI submitted final report and findings to TCEQ. The project is complete.
Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to quality data.							
1.3.01	**Update of the Ecological Program Code for the Cuenca de Burgos Region, Tamaulipas**	SEDUMA	2 Million Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a Monitoring and Evaluating System for the most relevant environmental Indicators, considering performance, defining measurements that allow one to track the strategy's effectiveness and the code's defined policies.	The external consultant completed all program updates that included modifications to the current code model. The updated study was revised and certified by the Ecological Program Code Committee of Tamaulipas. The project is complete.

Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States and build the necessary capacity to guarantee sustained implementation.							
1.4.01	**Municipal Climate Action Plan of San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	2.199 Million Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a public policy planning instrument for the development of strategies and actions to mitigate greenhouse gas emissions. Reduce municipal vulnerability to climate change by enhancing adaptability.	The project was not executed due the fact that funds were not allocated to the project by the government.
1.4.02	**Tamaulipas State Climate Change Program**	SEDUMA Tamaulipas	$200,000	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Update the greenhouse gas emissions inventory and develop the program's climate change adaptation agenda	The program was presented by the State Governor during the second session of the Secretarial Commission on Climate Change for the State of Tamaulipas (CICCTAM). They are in the process of publishing an article in the official state newspaper. The project is complete.
1.4.03	**Energy Efficiency in Municipal Public Lighting Systems of Tamaulipas** Raise awareness and sensitize technical staff on the responsibility in the operation and use in the current administrations to save energy in lighting systems, buildings and facilities in the 10 border municipalities of the state.	SEDUMA Tamaulipas	$9,385	Border 2020	Oc. Heberto Cavazos Lliteras SEDUMA Tamaulipas heberto.cavazos@tamaulipas.gob.mx 01 (834) 107-82-60	Train 30 public servants of 10 municipalities with basic tools to achieve greater energy efficiency and money saving.	Two workshops were taught on Energy Efficiency in Public Lighting and Municipal Buildings and facilities. In all, there were 30 participants, 17 in the first workshop and 13 in the second. The benefiting population in the 10 municipalities is estimated at 733,000 inhabitants. The project is complete.

Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects.							
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC, in Spanish) for Coahuila: Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	The project is currently in the Microeconomic and Public Policy Phase for Coahuila. Meetings have been held with the Technical Working Groups, the Advisory Group, and the Climate Change Committee. The project is still in progress.
1.5.02	**Air Quality Network in Coahuila** Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipalities of Piedras Negras, Acuña, Nava, Sabinas, Saltillo	12 Million Pesos	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Establish an operating ambient air quality monitoring network in the Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila.	The project has been authorized and is in the review phase prior to bidding.
1.5.03	**Tamaulipas Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$300,000	BECC, BID	Tomás Balarezo, BECC, tbalarezo@cocef.org	Select a number of prioritized mitigation public policies for climate change.	The Identification of Mitigation Politics Report was presented in the month of February. Currently, the ISBN is in progress. The project is complete.
1.5.04	**Ambient Air Monitoring System** Strengthen Tamaulipas' ambient air monitoring system.	SEDUMA Tamaulipas	Annually: 250,000 Pesos (150,000 Municipal & 100,000 State)	SEDUMA, City Council of Matamoros	Biól. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	By 2014, the system will operate at 100% with programmatic consistency standards.	Currently there are 8 PM10 monitors operating. They are planning an operational post for four monitors in Matamoros in January 2017.Of the systematic samples collected in these cities, it was determined that air quality is satisfactory and that their values are located below the maximum permissible limits.

1.5.05	**Green Infrastructure Workshop**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Train municipalities on Green infrastructure.	Two workshops were held. On April 21, 2015, 05 municipalities from the Southeast region participated. A second workshop on May 27, 2015 included attendees from 10 municipalities in the Central and Desert regions. The Green Infrastructure Forum was held on September 21 and 22 with the participation of states along the border.

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	**Upgrade Nuevo Laredo Sewer Line Infrastructure** Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande	COMAPA and Municipio de Nuevo Laredo	$5 Million	NADB	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Complete the project by January 2015.	The BECC certified the project in September 2012. Of the five sewer lines, one was completed during the first half of 2014. The remaining four lines are under repair and discharge about 1.6 MGD to the storm water system. Another discharge point was identified by COMAPA in the Arroyo La Joya and will be repaired.
2.2.02	**Nuevo Laredo Management of Fats, Oils, and Grease (FOG)**	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo León.	$32,533	Border 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo,	Hold workshops and follow-up with commercial establishments	COMAPA organized workshops with the support of students from the Technical University to educate commercial

	Reduce the amount of fats, oils, and grease in the effluent coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo				jcarlos_faz@hotmail.com 01152867 717-24-44	on implementation of FOG programs	establishments and residents on best practices. The last workshop was held in August 2015 and included a tour of the International Waste Water Treatment Plant. All the establishments that participated in the workshops have grease traps and are applying control and operating techniques. The project is complete.
2.2.03	**Ideal Biological Filtration Material South Texas Storm Water Management** Identify the best locally available material for use in bio-swale in the Lower Rio Grande Valley & South TX.	University of Texas RGV	$26,022	Border 2020	Jungseok Ho, Ph.D., P.E. Assistant Professor (956) 665-3104 jungseok.ho@UTRGV.edu	The proto-type bioswale will be tested in a newly constructed parking lot on the Edinburg campus of the University of Texas RGV.	The recycled ground glass of medium porosity demonstrated good hydrologic performance in the biological filtration process.
2.2.04	**Decision Making Tool for Determining Storm Water Detention** Promote research and educational topics emphasizing how green infrastructure strategies can be utilized to mitigate storm water runoff, to maximize local storm water runoff detention at development projects, to minimize localized flooding in urban, rural, and colonia settings, and to manage oil and grease and other illicit discharges.	Texas A&M University-Kingsville	$38,885	Border 2020	Javier Guerrero, E.I.T., M.S. Texas A&M University-Kingsville (956) 929-7189 Javier.Guerrero@tamuk.edu	Conduct educational workshops to identify existing green infrastructure (GI) structures and BMPs, draft a Quality Assurance Project Plan. DMTG model development, calibration and implementation. Host workshops to showcase the innovative tool.	

Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	**Removal of Invasive Plants** Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Slim Foundation	1.5 Million Pesos Annually	SEMA Coahuila, CONANP, Profauna WWF, Slim Foundation	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Plant Control: removal by year, in hectares (ha) 2015: *Tamarix* 34 ha and Carrizo 40 ha 2016: *Tamarix* 34 ha and Carrizo 40 ha.	Since 2014 PROFAUNA and CONANP with the support of WWF and the Slim Foundation have annually eradicated 34 hectares of the *Tamarix* plant and 40 hectares of Carrizo cane. To date they have continued to protect the same quantity of land and it is anticipated that they will eradicate this amount in 2016.
2.3.02	**Conservation of Arroyo Las Vacas** Design and implement actions to improve water quality and promote an adequate habitat for flora and fauna species in the Arroyo Las Vacas.	Ciudad Acuña Environment Department, SEMA Coahuila	$44,200	Border 2020	Lic. Alejandra Carrera, Secretaria de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implement actions to improve water quality and promote an adequate habitat for flora and fauna in Las Vacas.	SEMA Coahuila and TCEQ organized a binational surface water quality monitoring workshop in October 2015 at Amistad Dam. Participants learned about surface water quality monitoring programs, sampling techniques and data comparison on specific water quality parameters. SEMAC is interested in creating a program similar to Texas' Clean Rivers Program. SEMAC and its partners conducted water quality sampling at 15 sites along the Arroyo Las Vacas. A closing ceremony of the Las Vacas project was held in Ciudad Acuña in February 2016.
2.3.03	**Lower Rio Grande Binational Water Quality Initiative (LRGWQI)** Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf of Mexico) that characterizes the state of the river, develops a strategic plan to	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan ,TCEQ, 512-239-2369, Kelly.holligan@tceq.texas.gov		In April, 2016, the Binational Technical Work Group (BTWG) completed the last of four binational synoptic water quality surveys. The BTWG also completed a preliminary hydrologic and hydraulic calibration of state to state water

	improve environmental conditions, and proposes a monitoring plan to document progress						quality models of the Rio Grande/Río Bravo. Finally, the BTWG completed a preliminary draft of a watershed characterization associated with the project.
2.3.04	**Fat, Oil and Grease (FOG) Public Outreach Campaign** Provide outreach and education to improve water quality by reducing the number of sanitary sewer overflows from commercial and residential customers while increasing environmental awareness of how fat, oil and grease contribute to a potential health hazard if not handled correctly	Brownsville Public Utilities Board	$25,000	Border 2020	Alicia Gracia, Brownsville Public Utilities Board agracia@brownsville-pub.com (956) 983-6483	Create and implement a Fat, Oil and Grease Public Outreach campaign to reach at least 250,000 citizens. Host four workshops and provide one-on-one assistance to at least 50% of the businesses in need of further education.	From February to April 2016 a total of 26 "Cease the Grease" training sessions, were performed. A total of 256 people participated in these trainings. The FOG trouble call history showed a reduction of 22 service call requests generated compared to same period in 2015. Public service announcements, flyers, social media, TV interviews and digital billboards has been used to promote the FOG Campaign.
2.3.05	**Dissemination and Awareness of the Regulations for the Control of Discharges** Promotion and dissemination of local discharge regulations among stakeholders to enable their implementation and enforcement through training workshops	Junta de Aguas y Drenaje – Matamoros, Tamaulipas	$25,000	Border 2020	Arkelao López JAD Matamoros 868 150-21-30 arkelao57@gmail.com	Work on a municipal wastewater discharge ordinance. Hold educational workshops on FOG program. Perform wastewater lab testing on commercial users.	The project was canceled.
2.3.06	**Supporting Local Stakeholder Participation in the Lower Rio Grande/Rio Bravo Water Quality Initiative**	University of Texas at Austin	$58,575	Border 2020	Dr. David Eaton eaton@mail.utexas.edu	Organize five workshops on local water quality issues. Develop a	

	Foster a sense of ownership among local stakeholders of a binational plan to restore and protect the water quality in the Lower Rio Grande and establish a sustainable forum for local information exchange and cooperation among of the binational community of water users in the Lower Rio Grande					Memorandum of Understanding (MOU) between stakeholders and binational partnerships.	

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices							
3.1.01	**Nuevo Laredo Environmental Education Program** Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America Beautiful	Keep Laredo Beautiful, Keep America Beautiful, and the Municipality of Nuevo Laredo		City of Laredo Environmental Services, local partners, and Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establish an environmental organization affiliated with Keep America Beautiful by 2016.	Keep Laredo Beautiful met with officials of the Technological University of Nuevo Laredo in October of 2015 and January 2016 to discuss the general requirements for an organization to be affiliated with Keep America Beautiful. Officials of the University will start a recruiting process to form a board of directors in Nuevo Laredo. As of September 2016, Keep Laredo Beautiful is awaiting guidance by the city manager on establishing the account and will require a Memorandum of Cooperation with Nuevo Laredo to move forward with this process.

3.1.02	**Characterization of Municipal Solid Waste, Waste Streams & an Evaluation Regarding Generation/Management of Waste** Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo León.	Secretariat of Sustainable Development Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000	Border 2020, BECC	Norma Rangel Sevilla, SDS, Nuevo León, normaarangel@gmail.com 0115281 20 33-19-38	Analyze the generation of solid and "special management" wastes in six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	Project completed. The study was finished in June 2015. More details of the study will be provided at a later date.
3.1.03	**Operation of an Electronic and Household Hazardous Waste Collection Center**	Municipality of Nuevo Laredo, Tamaulipas	3.626 Million Pesos	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Develop the municipal infrastructure for collecting, managing, and disposing of electronic and hazardous waste	The collection center received the corresponding authorization from the SEMARNAT federal delegation in the state of Tamaulipas. Operations began July 8, 2016. It is noted that this is the only Electronic and Household Hazardous Waste Collection Center in Mexico. The project is still in progress.
3.1.04	**Environmental Ordinance for the Disposal of Construction Waste**	Municipality of Nuevo Laredo, Tamaulipas	The project is funded through money paid by residents for the management and processing of waste.	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretary of Public Works, Urban Development & the Environment, cdeandah@hotmail.com	Generate an alternative for the community for the disposal of construction waste and mitigate illegal dumping.	This project has operated continuously and generated an important effect on the community. It charges 123 pesos per cubic meter when the waste is no greater than two cubic meters. If it is three to ten cubic meters, the service costs 88 pesos. If it exceeds 10 cubic meters, 100 pesos are charged per cubic meter. The project is still in progress.
3.1.05	**Keep Pharr Beautiful Clean-up Campaign**	Public Works Department, City of Pharr	$20,000	Border 2020	Grace Gonzalez, Pharr Public Works Department,	Reduce illegal dumping in residential and industrial sectors	The project was completed and the majority of objectives were attained. Various public awareness events and monthly

	Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.				grace.gonzales@pharr-tx.gov	and encourage residents to take responsibility for the beautification of their communities.	clean-ups were organized. A workshop was organized for the community about the reduction of illegal dumping. The City plans to continue clean-up campaigns and environmental education activities.
3.1.06	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838	Border 2020	Melissa Gonzales, City of Alamo	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Various presentations were organized in 12 different locations that reached 700 students. Bilingual signs about not littering were posted. The project was completed.
3.1.07	**Clean-up of Urban Solid Waste Disposal Site in Guerrero, Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	3.169 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Legalize and encourage compliance with NOM-083-SEMARNAT-2003, regarding the closure of final disposal sites.	Due to a budget cuts suffered by the Housing Ministry at SEMARNAT, the project did not receive funding in 2015. The project will not be funded this year.
3.1.08	**Construction and Equipment of the First Phase of the Type A Landfill in Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	19.359 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Ensure adequate and modern infrastructure for the final disposal of urban solid waste.	Project certified by SEMARNAT and documentation for the adjudication of resources is being processed.

3.1.09	**Construction of and Equipment for Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz and Sabinas	25 Millones Pesos	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Conduct soil studies. Under analysis prior to request for bids. The project is still in progress.
3.1.10	**Construction of and Equipment for a Regional Landfill in the Municipalities of Juárez and Progreso, Coahuila**	SEMA, Municipality of Juárez and Progreso	8 Millones Pesos	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis prior to request for bids. The project is still in progress.
3.1.11	**Construction of and Equipment for two Urban Solid Waste Transfer Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	8 Millones Pesos	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis prior to request for bids. The project is still in progress.
3.1.12	**RECOLECTRÓN Program** Collection program for used electronics in the municipalities.	SEMA, Municipalities of Acuña, Allende, Nava and Sabinas	2 Million Pesos	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	In 2015 collect 44.91 tons. In 2016 collect 56.14 tons.	To date 44.89 tons has been collected. The project is still in progress.
3.1.13	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Using three slices, reduce the volume and risk of standing water, a breeding ground for mosquitoes (vectors for dengue fever).	Municipality of Acuña, Coahuila	$12,000	Municipio de Acuña Coahuila	Biól. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx	Develop the municipal infrastructure for storing, managing, and disposing of scrap tires.	A regulatory framework regulates management and a program is underway for storage, but infrastructure is required for final disposal. To date more than 50,000 tires have been collected, resulting in 95% mitigation of vectors. The project is still in progress.

3.1.14	**Disposal of Used Electronic and Hazardous Waste** Create a storage center for the special management of waste, in which	Municipality of Acuña, Coahuila	$12,500	Municipality of Acuña Coahuila	Biól. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx	Develop the municipal infrastructure for storing, managing, and disposing of used electronic and hazardous waste.	The regulatory framework was approved by the city council as well as changes to municipal environmental regulations regarding to approve an operating license for six months and certification of training workshops. Partnering with CECATI #197 for certification. To date 29 tons of waste have been collected. The program is carried out in coordination with SEMA. The project is still in progress.
3.1.15	**Scrap Tire Management Program** Design and implement a state scrap tire management program that includes valuation.	SEDUMA Tamaulipas	400 Million Pesos	SEDUMA, SEMARNAT, EPA	Biól. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Work with each of the state's northern border cities to systematically regulate the temporary storage and collection of used tires.	Two projects in the area of environmental impact have been authorized in the municipalities of Reynosa and Valle Hermoso, in which 350,000 tires shall be processed annually. The State Government of Tamaulipas with the participation of state funds acquired a tire shredder which processed 63,000 tires between 2013 and 2016 in the southern part of the state.

3.1.16	**Strengthen Solid Waste Programs** Design of a strategic planning tool that will comply with the National and State Programs for the Prevention and Management of Municipal Solid Waste in the municipalities of Río Bravo and Valle Hermoso, Tamaulipas.	SEDUMA Tamaulipas	$20,866	Border 2020	Oc. Heberto Cavazos Lliteras , SEDUMA, ssma@tamaulipas.gob.mx	Update the municipal solid waste environmental management system. Evaluate the management of municipal solid waste. Prepare a study on municipal solid waste generation.	Two programs were developed regarding the Prevention and Integral Development of Solid Wastes in Río Bravo and Valle Hermoso. In the same municipalities, a study was conducted "Creation and Composition of Solid Wastes." The planning documents were given to participating municipal representatives. The project is complete.
3.1.17	**Let's Clean it Up and Green it Up** Reduce littering and illegal dumping in all areas of the city, and improve the overall aesthetics of the city and offer viable solid waste disposal options for residents.	City of Pharr	$36,390	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Offer more solid waste, recyclables and tire disposal events. Install convenient recycling drop off areas. Host recycling and tire and illegal dumping education workshops. Improve existing residential tire tagging system.	The project conducted various storm water management and recycling workshops that reached students and residents, Social media and public service announcements were used to promote recycling and storm water activities.
3.1.18	**Electronic Waste Recycling** Develop an educational campaign aimed at reducing used electronics by creating an integrated electronic waste recycling program and promoting sustainable practices	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	$36,054	Border 2020	Ing. Víctor Ibarra, Instituto Tecnológico de Piedras Negras, ing_victor_m@prodigy.net.mx	Conduct workshops and campaigns at schools and public events on used electronics.	In Piedras Negras, two municipal collection centers were installed and collected 14,145 kilos of electronic waste. 18,0000 inhabitants were visited in 10 city neighborhoods and an electronic waste workshop was held for 55 associates of Green

							Tec-Osos. The first walk was held in March 2016 with more than 1,200 participants. The First Environmental Impact Health and Education Symposium was held in 2016 and was attended by 410 teachers and students from 17 schools. Electronic waste was one of the topics. The project is still in progress.
3.1.19	**Used Electronic Recycling** Inform and educate the population of the benefits of reusing used electronic products, including sustainable management of consumer electronic goods and adequate disposal practices	SEMA Coahuila	$16, 777	Border 2020	Ing. Oscar Flores, SEMA, 01152844 698-10-91 ext.7268 oscar.flores@sema.gob.mx	Conduct an assessment as well as training of municipal ecology staff on used electronics and implement actions for adequate disposal.	The same project is listed in 3.1.12. The project is still in progress.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	**Update Cross-Border Contingency Plan** Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo	Laredo Fire Department, Civil Protection of Nuevo Laredo, and CILA, CODEFRONT, and the City of Laredo		EPA, COCEF, PROFEPA, and Protección Civil	Steve Landin, Laredo Fire Department, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa,	Hold new meetings of the staff of the two cities in order to revisit the language of the draft revision and possibly develop alternative language	At a binational meeting held in July in Nuevo Laredo, the Laredo and Nuevo Laredo mayors approved the final versions in English and Spanish and signed the Los Dos Laredos Cross-Border Contingency Plan. The plan will be reviewed by both

	(Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.				Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com 01152867 712-46-35	and include Colombia in the plan.	cities every two years and it also specifies that the Laredo Fire Department will assist in an advisory capacity with any contingency plans on the Mexican side.
4.2.02	**Hazardous Materials First Responder Binational Training in McAllen-Mission-Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Fire Department	$75,000	Border 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540	Hold an Incident Command System (ICS) training with firefighters from McAllen, Mission, Pharr, and Reynosa. Enhance binational communications and hazmat response. Update regional sister city plan contact information.	On August 2015, McAllen and Pharr Fire Department hazmat certified technicians provided an ICS training to 30 first responders from Reynosa, San Fermando and Miguel Alemán, Tamaulipas. All participants trained with new tanker simulators. A full tabletop and functional exercise was conducted at the Pharr- Reynosa international bridge. The regional sister city plan contact list was updated.
4.2.03	**Binational Tabletop and Functional Exercises between the cities of Harlingen and Matamoros**	City of Harlingen Fire department	$60,000	Border 2020	Rogelio Rubio Harlingen Fire Chief rrubio@myharlingen.us	Hazmat training, a tabletop and functional exercise, partnering with first responders from Matamoros and the Cameron County Local Emergency Planning Committee.	The project was completed in May 2016 with a week-long Hazmat training culminating with a functional exercise involving response to a chlorine incident. The city of Harlingen and Matamoros have established the ability to implement standardized response in real time communication in the event of hazardous materials incidents.

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Piedras Negras Urban Forest**	SEMA, Municipio of Piedras Negras, SEMARNAT	15 Million Pesos	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Develop a 15 hectare urban forest in the city of Piedras Negras.	98% percent of the project is complete. The project is still in progress.
6.0.02	**Strengthening School Networks and Global Climate Change Surveillance "Casa de Tierra"**	SEDUMA, Municipal Government of Reynosa	$ 66 Million	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Build, equip, and operate three "Casas de Tierra" to help the residents in the northern, central, and southern areas of the State. 160,000 annual visitors.	CDT Victoria operating since December of 2013. CDT Reynosa operating since January 2015. CDT operating since August 29, 2016.
6.0.03	**Expansion of Environmental Management Systems Program** Expand Tamaulipas' state program in promoting environmental management systems (EMS, or SIMA, in Spanish) to more schools and government offices	SEDUMA Tamaulipas	$ 300,000	SEDUMA, Empresas Participants	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Implement and operate EMS (SIMAs) in schools and government offices in the main cities.	With SIMAs (2011-2016), more than 458 tons of waste were recycled (mainly old files), preventing the cutting down of 786,000 trees, a savings 12.4 million liters of water and more than a thousand cubic meters of space in the land fill.

ED_002319B_00013752-00019

6.0.04	**Information Model for Health & Environmental Planning Along the Texas-Mexico Border** Development of a conceptual framework for a binational environmental and health information repository.	El Colegio de la Frontera del Norte	$39,875	Border 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identify required tools and needed capacity, compare existing systems, identify and recommend training or educational needs, and develop an indicator system to measure environmental health.	A theoretical framework to identify information on health and the environment has been worked on. Various key actors were interviewed. Information was obtained about health and environmental indicators through the development of Memoranda of Understanding between academic institutions involved in the project and the respective Secretariats of Health and the Environment of the state of Coahuila. The project is still in progress.
6.0.05	**Promotora-Led Environmental Health Education for Children** 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 heath promotoras, who subsequently will provide educational information in elementary schools, child care settings and to colonia residents.	La Amistad AHEC and Southwest Border AHEC	$69,083	Border 2020	Rosa Elvira Martinez, Southwest Area Border Health Education Center, rose.martinez@swbahec.org (830) 758-1111	Conduct training and provide educational information on pesticide awareness to elementary schools and homes in colonias.	34% of homes completed the pre assessments within 7 to 8 weeks and 14% of the homes completed the training in less than four weeks. Each of the 29 homes completed the post-assessments. The results indicated that 27 questions of the 44 in the pre and post assessments showed an improvement in the scores and nine houses remained constant both in the pre and post assessments. The project ended in December 2015.
6.0.07	**Environmental Education and Legislative Action Reforms**	Universidad Autónoma de Tamaulipas, Facultad de	$11,000	Border 2020	Dr. Juan Herrera Izaguirre, Universidad Autónoma de Tamaulipas, 0115286719-42-50	Update Nuevo Laredo's environmental regulations in	Training was held for staff in the Environment and Climate Change Division regarding knowledge related to

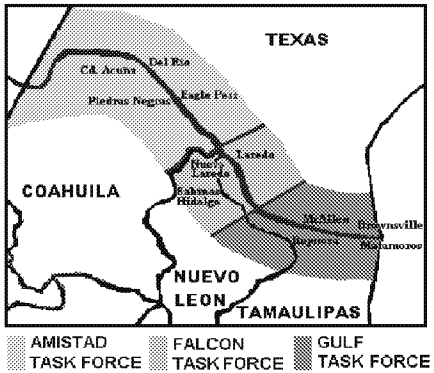
	Improve the implementation of environmental legislative reforms by exchanging information on environmental education and enforcement regulations that will improve air quality, environmental compliance and solid waste management in Laredo and Nuevo Laredo	Comercio, Administración y Ciencias Sociales de Nuevo Laredo			jaherrera@uat.edu.mx	accordance with state and federal regulations, develop a database of environmental regulations in Tamaulipas border municipalities, train 15 Nuevo Laredo code enforcement and ecology staff on municipal environmental regulations, and promote sustainable management of waste and water conservation at schools.	environmental legislation, the protection of water and recycling. The sessions expounded on topics related to federal, state, and municipal law through the use of technology as well as how to identify the jurisdiction in the three areas mentioned above. A conference was held about the role of inspectors, their administrative duties and how it relates to the environment. The project is still in progress.

FRONTERA 2020

Plan de Acción 2015-2016

Grupo de Trabajo Regional TX-COAH-TAMP-NL

Diciembre del 2016



El Grupo de Trabajo Regional de los Cuatro Estados es el más complejo de los cuatro grupos regionales, debido a su extensión geográfica y el número de municipios que lo integran. La región incluye partes de los tres estados y por lo menos 29 municipios del lado mexicano y 168 ciudades y centros poblados del lado estadounidense. Reconociendo lo anterior, este grupo de trabajo se dividió en tres equipos de trabajo con un enfoque geográfico: Amistad, Falcón, y el Golfo, cada uno de los cuales ha creado comités para temas específicos relacionados con sus prioridades.

Frontera 2020 tiene cinco metas y los grupos regionales de trabajo proponen proyectos para poner en práctica estos objetivos. A estos proyectos se les da un seguimiento a través de los planes de acción revisables cada dos años. La versión 2015-2016 es el segundo de su tipo. Varios proyectos han sido prorrogados del Plan de Acción 2013-2014, debido a un consenso por parte del grupo de trabajo de los cuatro estados, se incluyó una sexta meta para proyectos de salud y educación. Los proyectos son organizados por Frontera 2020 en metas y objetivos.

Durante el primer semestre de 2015, los tres equipos de trabajo llevaron a cabo reuniones para discutir las prioridades iniciales para el Plan de Acción 2015-2016, así como varias conferencias telefónicas de líderes se celebraron en junio de 2015 para desarrollar un consenso de las prioridades en cada equipo de trabajo y a nivel del grupo regional de trabajo.

Prioridades Regionales

1. Mejorar la calidad del aire a través de los siguientes enfoques:
   a. Incrementar la eficiencia energética a nivel de consumo y el uso de energías renovables en todos los niveles pertinentes
   b. Analizar las emisiones y sus fuentes en cuencas atmosféricas específicas

2. Mejorar la calidad del agua mediante la adopción de las siguientes medidas:
   a. Evaluar la parte de la cuenca del Río Bravo que se encuentra en esta región
   b. Establecer programas de aplicación de la ley para prevenir la contaminación de los cuerpos de agua en el lado mexicano
   c. Mejorar la infraestructura del agua con respecto a respecta a los sistemas de tratamiento y distribución en las zonas rurales

3. Abordar los problemas de la disposición inadecuada de los residuos

4. Ayudar a las comunidades a desarrollar capacidades para los flujos de residuos, mediante la implementación de reciclaje, recolección de residuos peligrosos y electrónicos domésticos y programas de disposición, y el desarrollo de planes integrales para la disposición de llantas de desecho y los mercados alternativos

ED_002319B_00013753-00001

5. Ampliar la educación ambiental relacionada con el tema de los residuos

6. Mejorar la Preparación Conjunta para la Respuesta Ambiental
   a. Proveer capacitación HAZMAT a personal de respuesta a contingencia locales para reducir la exposición a sustancias químicas como resultado de la emisión de sustancias químicas accidentales y/o derrames
   b. Coordinar ejercicios de mesa de preparación de respuesta a emergencias o en campo

7. Desarrollar un curriculum de salud ambiental certificado para capacitar trabajadores de salud comunitario y promotoras sobre pesticidas, plomo, mercurio, y otros metales pesados

Prioridades Individuales de Cada Equipo de Trabajo

Equipo de Trabajo Amistad

1. Generar planes para mitigar los impactos del cambio climático en Coahuila
2. Establecer estaciones de monitoreo de calidad del aire e intercambiar datos con Texas
3. Desarrollar una base de datos para medir las emisiones de las operaciones de fractura hidráulica en Coahuila
4. El aumento del uso de fuentes de energías alternativas y renovables (como el bio gas de relleno sanitario y energía solar)
5. Desarrollar programas de conservación y reutilización de agua para riego en Coahuila
6. Establecer programas de gestión de residuos en diez municipios de Coahuila (incluyendo residuos electrónicos, gestión de residuos peligrosos y su reciclaje)
7. Desarrollar y promover programas de gestión de llantas de desecho, reciclaje y residuos sólidos en la reservación Kickapoo

Equipo de Trabajo Falcón

1. Realizar un estudio sobre el uso del gas metano para la generación de energía en los rellenos sanitarios
2. Monitorear e seguimiento de las operaciones de perforación en el Eagle Ford Shale y en el lado mexicano
3. Finalizar el plan de contingencia transfronteriza
4. Generar estudios y proyectos para la reutilización y la conservación del agua
5. Desarrollar una gestión adecuada, mercados alternativos (como trituradores de neumáticos) y reglamentos para llantas de desecho
6. Establecer programas referentes a residuos electrónicos y residuos peligrosos domésticos en los municipios del Equipo de Trabajo Falcón
7. Desarrollar un estudio de diagnóstico en materia de generación y los mercados alternativos para residuos de la construcción en el Equipo de Trabajo Falcón
8. Desarrollar un taller de trabajo sobre las mejores prácticas relacionadas con la salud pública y los indicadores de educación ambiental

Equipo de Trabajo del Golfo

1. Programas para mejorar la eficiencia energética.
2. Educar a la comunidad sobre cómo mejorar la calidad del agua
3. Mejorar o desarrollar programas de gestión para el Pretratamiento Industrial, Grasas y Aceites, y aguas pluviales.
4. Aumentar la conciencia ambiental y la responsabilidad con respecto a efectos de la salud en residentes municipales, comunitarios rurales y colonias populares provenientes de los residuos sólidos y las aguas residuales
5. Capacitación para Promotoras en Viviendas Saludables a lo largo de la frontera de Estados Unidos - México en el Equipo de Trabajo Golfo

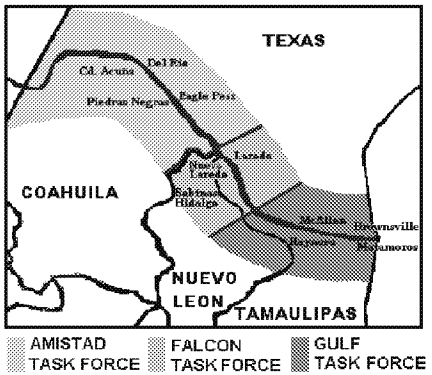
ED_002319B_00013753-00002

Frontera 2020

Esquema del Plan de Acción 2015-2016
del Grupo de Trabajo Regional de los Cuatro Estados

Leyenda:

- Actividad que abarca áreas de por lo menos dos Equipos de Trabajo
- Equipo de Trabajo del Golfo
- Equipo de Trabajo Falcón
- Equipo de Trabajo Amistad



META # 1: Reducir la Contaminación del Aire

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objetivo 1: Para el año 2020, reducir el número de vehículos que operan en la región fronteriza sin cumplir con las normas sobre emisiones vehiculares, y reducir las emisiones vehiculares en los puertos de entrada, aplicando medidas contra la marcha en vacío y otras medidas de reducción factibles.							
1.1.01	**Caracterización de las Actividades y Emisiones de Tracto Camiones de Carga en la Cuenca Atmosférica Laredo-Nuevo Laredo** Desarrollar una caracterización detallada de la actividad de acarreo en la región de Laredo-Nuevo Laredo y sus implicaciones de calidad del aire.	Texas A&M Transportation Institute (TTI)	$89,750	Frontera 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Recopilar información de la actividad en los vehículos de acarreo para estimar sus emisiones e impactos en la cuenca atmosférica de Laredo y Nuevo Laredo.	El estudio indicó que el puente de comercio mundial tiene una alta concentración de partículas suspendidas debido al tiempo de espera para el cruce de camiones y que la disminución de velocidad por los camiones de carga y sus movimientos coincidían con el alto nivel de partículas suspendidas en el puente y en áreas urbanas, en base a su destino. TTI organizó

ED_002319B_00013753-00003

							un taller en diciembre del 2015 para compartir los resultados. El proyecto ya concluyó.
1.1.02	**Emisiones de Tracto Camiones Mexicanos de Diésel en el Corredor Laredo – San Antonio** Encuesta de la actividad de tracto camiones de diésel y la evaluación der las emisiones típicas de los tracto camiones diésel mexicanos a lo largo del corredor Laredo-San Antonio.	Texas A&M Transportation Institute	$100,000	EPA, TCEQ	Dr. Reza Farzaneh,TTI, Reza.Farzaneh@tamu.edu, (512) 467-0946	Recolección y análisis de datos. TTI presentó los resultados y entregó el informe final en Agosto del 2015.	Se espera que incremente la contribución de las emisiones de fuentes móviles de diésel al inventario de emisiones atmosféricas de las áreas del Eagle Ford Shale y San Antonio. En el 2014-2015 la TCEQ manejó un proyecto con el TTI para medir el volumen actual y anticipar incrementos en el tráfico de camiones y remolques de carga pesada en el corredor de la carretera interestatal 35 entre Laredo y San Antonio. Los resultados del proyecto ayudaron en la planeación para mantener la calidad del aire en San Antonio a raíz del aumento del tráfico de camiones de diésel. TTI entregó un reporte final con sus resultados a la TCEQ. El proyecto ya concluyó.
Objetivo 3: Para 2018, mantener sistemas eficaz de monitoreo del aire y proveer acceso a los datos cualitativos en tiempo real.							
1.3.01	**Actualización del Programa de Ordenamiento Ecológico de la Región Cuenca de Burgos, Tamaulipas**	SEDUMA	2 Millones Pesos	SEDUMA, SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Formular un Sistema de Monitoreo y Evaluación de los Indicadores Ambientales más relevantes del Ordenamiento Ecológico, considerando el desempeño de estos; definiendo métricas que permitan medir la	El consultor concluyó los trabajos de la actualización del programa con las propuestas de modificaciones al modelo de ordenamiento vigente. El estudio actualizado fue revisado y validado por el Comité de Ordenamiento Ecológico de Tamaulipas. El proyecto ya concluyó.

						eficacia de las estrategias y políticas definidas en el ordenamiento.	
Objetivo 4: Para el año 2020, apoyar la finalización de planes de acciones de cambio climático en cada uno de los seis estados mexicanos norteños fronterizos y construir la capacidad necesaria para garantizar su implementación sustentable.							
1.4.01	**Plan de Acción Climática Municipal de San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	2.199 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Elaboración de un instrumento de planeación de políticas públicas para el desarrollo de acciones y estrategias para mitigar las emisiones de Gases de Efecto Invernadero, reducir la vulnerabilidad del municipio de manera tal que se aumente la capacidad de adaptación al Cambio Climático.	El proyecto no se llevó a cabo debido a que el recurso por parte de la Federación no fue asignado.
1.4.02	**Programa Estatal de Cambio Climático de Tamaulipas**	SEDUMA Tamaulipas	$200,000	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Actualizar el inventario de emisiones de gases efecto invernadero y desarrollar la agenda de adaptación al cambio climático.	El programa fue presentado por el Gobernador de Estado en el seno de la Segunda Sesión Ordinaria de la Comisión Intersecretarial de Cambio Climático del Estado de Tamaulipas (CICCTAM). Actualmente, se encuentra en proceso de publicación en el Periódico Oficial del Estado. El proyecto ya concluyó.

1.4.03	**Eficiencia Energética en Sistemas de Alumbramiento Público Municipal de Tamaulipas** Concientizar y sensibilizar al personal técnico sobre la responsabilidad en la operación y uso en las administraciones actuales para el ahorro de energía en sistemas de alumbrado y edificios e instalaciones en los 10 municipios fronterizos del estado.	SEDUMA Tamaulipas	$9,385	Border 2020	Ocean. Heberto Cavazos Lliteras SEDUMA Tamaulipas heberto.cavazos@tamaulipas.gob.mx 01 (834) 107-82-60	Capacitar 30 servidores públicos de 10 municipios con herramientas básicas para lograr una mayor eficiencia energética y que ello se refleje a su vez un ahorro económico.	Se impartieron dos talleres de Eficiencia Energética en Sistemas de Alumbrado Público y en Edificios e Instalaciones Municipales. Se contó con la participación de 30 participantes en total, 17 en el primer taller y 13 en el segundo. La población beneficiada de los 10 municipios se estima 733 mil habitantes. El proyecto ya concluyó.
Objetivo 5: Para el año 2020, reducir las emisiones y los impactos asociados por medio de la eficiencia energética y/o proyectos de energía alternativa o renovable.							
1.5.01	**Plan de Acción Climática de Coahuila** Está en proceso la Etapa 2 del Plan Estatal de Acción Climática (PEAC) de Coahuila: Cuantificación de las políticas públicas de mitigación seleccionadas en la Etapa 1.	Gobierno del Estado de Coahuila y COCEF	$275,000	COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Evaluación econométrica de las políticas públicas de mitigación seleccionadas en la Etapa 1.	Se lleva a cabo la Etapa de Análisis Microeconómico de Políticas Públicas para el Estado de Coahuila. Se llevan a cabo reuniones con los Grupos de Trabajo Técnicos, el Grupo Consultivo y el Comité Intersecretarial ante el Cambio Climático. El proyecto sigue pendiente.
1.5.02	**Red de Calidad del Aire en Coahuila** Establecer una red de monitoreo atmosférico en la región de Piedras Negras, Monclova y Saltillo, Coahuila.	SEMA (Coahuila) Municipios de Piedras Negras, Monclova y Saltillo	12 Millones Pesos	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Contar con una red de monitoreo atmosférico en funcionamiento en las regiones de Piedras Negras, Monclova y Saltillo.	El proyecto ha sido autorizado; se encuentra en etapa de revisión previa a la licitación.
1.5.03	**Plan de Acción Climática de Tamaulipas**	Gobierno del Estado de	$300,000	COCEF, BID	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Selección de una serie de políticas públicas de mitigación	El Informe de la Identificación de Políticas de Mitigación Prioritarias en el mes de febrero.

	Está en proceso la Etapa 2 del Plan Estatal de Acción Climática (PEAC) de Tamaulipas: Identificación y Cuantificación de las políticas públicas de mitigación seleccionadas en la Etapa 1.	Tamaulipas y COCEF				priorizadas para el cambio climático.	Actualmente, se encuentra en trámite el ISBN. El proyecto ya concluyó.
1.5.04	**Sistema de Monitoreo Atmosférico** Fortalecer el sistema de monitoreo atmosférico en Tamaulipas	SEDUMA Tamaulipas	Anual: 250,000 Pesos (150,000 Municipal Y 100,000 Estatal)	SEDUMA Ayuntamiento de Matamoros	Biol. Jorge Garcia, jgarciah@tamaulipa.gob.mx 834 1078291	En el 2014, el Sistema operará al 100% con normas consistentes programáticas.	Se encuentran operando actualmente 8 equipos PM10. Se tiene en gestión la puesta en operación de los 4 equipos ubicados en Matamoros en enero del 2017. De los muestreos sistemáticos hechos en estas ciudades se ha determinado que la calidad del aire es satisfactoria, toda vez que sus valores se encuentran por debajo de los límites máximos permisibles.
1.5.05	**Taller de Infraestructura Verde**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Capacitar a municipios en el Estado sobre infraestructura verde.	Se llevaron a cabo 2 talleres. Uno el 21 de abril del 2015 en donde se atendieron a 5 municipios de la Región Sureste. El otro taller fue realizado el 27 de mayo del 2015 donde se atendieron a 10 municipios de la Región Centro y Desierto. Se llevó a cabo el Foro de Infraestructura Verde los días 21 y 22 de septiembre con la participación de los estados fronterizos.

Meta # 2: Mejorar el Acceso a Agua Limpia y Potable

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objetivo 2: Apoyar a los proveedores de servicios de agua y saneamiento de la región fronteriza en la implementación de prácticas de infraestructura sustentable, con el fin de reducir sus costos operativos, mejorar su eficiencia energética, y promover el uso eficiente del agua y la adaptación al cambio climático.							
2.2.01	**Actualizar la Infraestructura de la Red de Alcantarillado en Nuevo Laredo** Instalar / modernizar las redes de alcantarillado conectadas a la planta de tratamiento de aguas residuales de Nuevo Laredo, para evitar descargas contaminadas al Río Bravo.	COMAPA, Municipio de Nuevo Laredo	$5 Millones	NADB	CP Delfino González, COMAPA, dgcdelfino@comapannuevolaredo.gob.mx	Terminar el proyecto para Enero de 2015.	COCEF certificó el proyecto en septiembre del 2012. De las cinco líneas de alcantarillado, uno se completó a mediados del 2014. Los cuatro colectores restantes estaban en reparación y descargan e 1,6 MGD al sistema de aguas pluviales. Otro punto de descarga fue identificado por la COMAPA en el Arroyo La Joya y será reparada.
2.2.02	**Gestión de las Grasas y Aceites en Nuevo Laredo** Reducir la concentración de grasas y aceites en los efluentes de las descargas en restaurantes, hoteles y la Industria en la red de Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo Laredo.	$32,533	Frontera 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Realizar talleres de trabajo y seguimiento con los establecimientos comerciales en la implementación del Programa de Manejo de Grasas y Aceites.	COMAPA organizó con apoyo de alumnos de la Universidad Tecnológica una serie de talleres de trabajo para capacitar a residentes y los establecimientos comerciales en las mejores prácticas para el manejo y control de las grasas y aceites generadas. El último taller se realizó en agosto del 2015, incluyendo un recorrido en la Planta Internacional de Tratamiento de Aguas Residuales. Todos los establecimientos que participaron en los talleres de trabajo ya cuentan con un sistema de trampa de grasas y están aplicando las técnicas para

							el control y manejo de las mismas. El proyecto ya concluyó.
2.2.03	**Material Ideal para la Filtración Biológica en el Manejo de Aguas Pluviales** Identificar el mejor material disponible localmente para su uso en el bio canal de filtración en el Bajo Valle del Río Grande y el Sur de Texas.	University of Texas Rio Grande Valley	$26,022	Frontera 2020	Jungseok Ho, Ph.D., P.E. Assistant Professor (956) 665-3104 jungseok.ho@UTRGV.edu	El prototipo del Canal de Filtración Biológico se pondrá a prueba en un estacionamiento de nueva construcción en el campus de UT.	El vidrio molido de medio poroso reciclado mostró un buen rendimiento hidrológico en la Filtración Biológica.
2.2.04	**Herramienta para Toma de Decisiones para Determinar el Desarrollo del Impacto bajo de la Detención de Aguas Pluviales** Promover la investigación y los temas educativos destacando cómo las estrategias de infraestructura verde pueden ser utilizadas para mitigar el escurrimiento de las aguas pluviales, para maximizar la detención de escurrimiento de aguas pluviales locales en los proyectos de desarrollo, minimizar inundaciones localizadas y la configuración de las colonias rurales urbanas, y para el manejo del aceites y grasas y otros descargas ilícitas.	Texas A&M University-Kingsville	$38,885	Border 2020	Javier Guerrero, E.I.T., M.S. Texas A&M University-Kingsville (956) 929-7189 Javier.Guerrero@tamuk.edu	Llevar a cabo talleres educativos para identificar infraestructuras verdes existentes, redactar un plan de proyecto de garantía de calidad. Desarrollo de modelos DMTG, calibración y puesta en práctica. Ofrecer talleres para mostrar el DMTG y promover la herramienta innovadora.	

Objetivo 3: Trabajar en el ámbito binacional para identificar y reducir la contaminación de las aguas superficiales en cuencas o cuerpos acuíferos transfronterizos.							
2.3.01	**Control de Plantas Invasivas** Implementar un programa para eliminar plantas invasoras en el Río Bravo.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Fundación Slim	1.5 Millones Pesos Anuales	SEMA (Coahuila), CONANP, PROFAUNA WWF, Fundación Slim	Alejandra Carrera, SEMA Coahuila alejandra.carrera@sema.gob.mx 01152844 410-0014	Control de plantas: por año en hectares (ha) 2014: *Tamarix* 34 ha y Carrizo 40 ha 2015: *Tamarix* 34 ha y Carrizo 40 ha 2016: *Tamarix* 34 ha y Carrizo 40 ha	Desde el 2014 PROFAUNA y CONANP con el apoyo de WWF y la Fundación Slim han controlado anualmente 34 hectáreas de *Tamarix* y 40 hectáreas de Carrizo. Siguen protegiendo la misma cantidad de tierra y se pronostica que seguirán controlándolo la misma cantidad en el 2016.
2.3.02	**Conservación del Arroyo Las Vacas** Diseñar e implementar acciones para mejorar la calidad del agua y promover un hábitat adecuado para especies de flora y fauna en el Arroyo Las Vacas.	Ciudad Acuña Dirección de Ecología, SEMA Coahuila	$44,200	Frontera 2020	Lic. Alejandra Carrera, Secretaría de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implementar acciones para mejorar la calidad del agua y promover un hábitat adecuado para especies de flora y fauna en el Arroyo Las Vacas.	La SEMA y TCEQ organizaron un taller binacional de monitoreo de calidad del agua en octubre del 2015 en la Presa Amistad. Se capacitó a los participantes sobre los programas de monitoreo, técnicas de muestreo y comparación de datos sobre parámetros de calidad del agua. La SEMA tiene interés en crear un programa de ríos vivos similar al programa de Texas. SEMA y sus contrapartes se llevaron a cabo un muestreo de calidad del agua en 15 sitios de monitoreo por el Arroyo Las Vacas. Se realizó una ceremonia de clausura del proyecto del Arroyo Las Vacas en Ciudad Acuña en febrero. El proyecto ya concluyó.

2.3.03	**Iniciativa Binacional de Calidad del Agua en el Bajo Río Bravo** Implementar una iniciativa binacional del Río Bravo en materia de Calidad del Agua (de Falcón hasta el Golfo) que caracteriza el estado del rio, desarrollando un plan estratégico para mejorar las condiciones ambientales, y proponer un plan de monitoreo para documentar el progreso.	TCEQ, EPA, IBWC, CILA, CONAGUA, y Agencias de los Gobiernos Federal, Estatal, y Local		TCEQ, EPA, IBWC, CILA, CONAGUA, y Agencias de los Gobiernos Federal, Estatal y Local	Kelly Holligan , TCEQ, Kelly.holligan@tceq.texas.gov 512-239-2369		En abril del 2016 el grupo de trabajo técnico binacional (BTWG) finalizó la última de cuatro encuestas binacionales de calidad del agua. El BTWG también finalizó la calibración preliminar hidrológica e hidráulica de los modelos de ciudades hermanas de calidad del agua del Río Bravo/Río Grande. Finalmente el BTWG terminó un borrador preliminar de la caracterización de la cuenca relacionado al proyecto.
2.3.04	**Campaña Publica de Concientización de Grasas y Aceites** (FOG) Proporcionar concientización y educación para mejorar la calidad de agua mediante la educación de usuarios comerciales y residenciales incrementando la conciencia ambiental en como las grasas y aceites contribuyen a un riesgo de salud si no se maneja adecuadamente, con esto se reducirán del número de desbordamientos de drenaje sanitario de clientes residenciales y comerciales	Junta de Servicios Públicos Brownsville	$25,000	Border 2020	Alicia Gracia, Brownsville Public Utilities Board agracia@brownsville-pub.com (956) 983-6483	Crear e implementar una campaña de manejo de grasas y aceites para los ciudadanos. La meta es concientizar a por lo menos a 250,000 clientes, llevar a cabo cuatro talleres y ofrecer la asistencia al menos el 50% de los negocios con necesidad de educación personalizada.	Desde febrero a abril del 2016 llevaron a cabo un total de 26 capacitaciones de "Elimina la Grasa." Un total de 256 personas participaron en dichos eventos. El historial de llamadas de grasas y aceites (FOG) mostró una reducción en 22 solicitudes de servicios por llamadas generadas comparada con el mismo periodo en el 2015. Los anuncios publicitarios, volantes, las redes sociales y carteleras digitales fueron usados para promover la campaña de FOG.

2.3.05	**Difusión y Concientización de las Regulaciones para el Control de las Descargas** Promoción y difusión local de reglamentos de descarga entre las partes interesadas para permitir su aplicación y cumplimiento a través de talleres de capacitación.	Junta de Aguas y Drenaje – Matamoros, Tamaulipas	$25,000	Border 2020	Arquelao López JAD Matamoros 868 150-21-30 arkelao57@gmail.com	Trabajar en una ordenanza de descarga de aguas residuales municipales. Realizar talleres educativos sobre el programa de grasas y aceites. Realizar pruebas laboratorio de las aguas residuales en los usuarios comerciales.	El proyecto fue cancelado.
2.3.06	**Apoyar la Participación de los Interesados Locales en el Bajo del Río Grande / Iniciativa de Calidad de Agua del Río Bravo.** Fomentar un sentido de pertenencia entre los actores locales de un plan binacional para restaurar y proteger la calidad del agua en el Bajo del Río Grande y establecer un foro sostenible para el intercambio de información local y la cooperación entre la comunidad binacional de los usuarios del agua en el Bajo del Río Grande.	University of Texas at Austin	$58,575	Border 2020	Dr. David Eaton eaton@mail.utexas.edu	Organizar cinco talleres sobre temas locales de calidad del agua y el intercambio de información y la formulación de soluciones. Creación del Memorando de Entendimiento (MOU) entre las partes interesadas y asociaciones binacionales.	

Meta # 3: Promover la Gestión Integral de Materiales, la Gestión de Residuos y Sitios Limpios

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**Programa de Educación Ambiental en Nuevo Laredo** Establecer una organización ambiental para desarrollar programas de sensibilización ambiental y de limpieza en Nuevo Laredo en la afiliación con Keep America Beautiful.	Keep Laredo Beautiful, Keep America Beautiful, y el Municipio de Nuevo Laredo		La Ciudad de Laredo, Depto. de Servicios Ambientales y Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establecer una organización ambiental afiliada con Keep America Beautiful en el 2016.	Keep Laredo Beautiful se reunió con funcionarios de la Universidad Tecnológica de Nuevo Laredo en octubre del 2015 y enero del 2016 para dialogar sobre los requisitos generales para que una organización sea afiliada a Keep America Beautiful. Funcionarios de la Universidad iniciarán el proceso de reclutamiento de miembros para formar una mesa directiva de la organización en Nuevo Laredo. Keep Laredo Beautiful tiene pendiente una resolución por parte del gerente de la ciudad respecto a la creación de una cuenta mancomunada y requiere un memorándum de cooperación con Nuevo Laredo para darle seguimiento a este proceso.
3.1.02	**Caracterización de Residuos Sólidos Urbanos, Corrientes y Diagnóstico en cuanto a la Generación / Gestión de Residuos**	Secretaría del Desarrollo Sustentable Nuevo León y el Municipio de Sabinas Hidalgo, Nuevo León	$47,000 US Dólar	Frontera 2020, COCEF	Norma Rangel Sevilla, SDS, Nuevo León, normaarangel@gmail.com 0115281 20 33-19-38	Analizar la generación de residuos sólidos y de "manejo especial" en los seis municipios fronterizos y	El estudio se finalizó en junio de 2015. Más detalles del estudio serán proporcionados en una fecha posterior. El proyecto ya concluyó.

	Estudiar y caracterizar el flujo de residuos sólidos urbanos en Sabinas Hidalgo, Nuevo León. Analizar la gestión de la generación de residuos sólidos y "manejo especial" en seis municipios fronterizos de Nuevo León.					caracterizar el flujo de residuos sólidos en Sabinas. Completar el estudio en 2015.	
3.1.03	**Operación de un Centro de Acopio de Residuos Electrónicos y Peligrosos Generados en las Casas de Habitación**	Municipio de Nuevo Laredo, Tamaulipas	$3.626 Millones Pesos MX	Municipio de Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Generar una infraestructura municipal para el acopio, manejo y disposición de los residuos peligrosos y electrónicos domésticos.	El Centro de Acopio recibió la autorización correspondiente por parte de la Delegación Federal de la SEMARNAT en el Estado de Tamaulipas. Inició operaciones el día 8 de Junio de 2016. Cabe destacar que este es el único Centro de Acopio de Residuos Peligrosos Domésticos Municipal en México. El proyecto sigue pendiente.
3.1.04	**Ordenamiento Ambiental para la Disposición de Residuos de la Construcción**	Municipio de Nuevo Laredo, Tamaulipas	El proyecto se opera con los recursos que paga el ciudadano por el manejo y gestión de los residuos.	Municipio de Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Generar una alternativa en la comunidad para la disposición de los residuos de construcción y mitigar los tiraderos clandestinos de este tipo de residuos.	Este proyecto ha operado en forma continua, generando un impacto importante por parte de la comunidad. Se paga 123 pesos por m3 cuando el residuo no es mayor a 2 m3. Si es de 3-10 m3 el servicio les cuesta 88 pesos. Si rebasa los 10 m3, se les cobra 100 pesos el m3. El proyecto sigue pendiente.
3.1.05	**Keep Pharr Beautiful Campaña de Limpieza** Apoyo a los programas de limpieza mensuales de Keep	Departamento de Servicios Públicos, Ciudad de Pharr	$20,000	Frontera 2020	Grace González, Pharr Departamento de Servicios Públicos grace.gonzales@pharr-tx.gov	Reducir los tiraderos clandestinos en los sectores residencial e industrial y alentar a los	El proyecto ha sido finalizado y la mayor parte de los objetivos fueron realizados. Se realizaron varios eventos de concientización, se llevaron a cabo varios eventos mensuales

	Pharr Beautiful con una fuerte difusión pública.					residentes a tomar responsabilidad por la conservación de sus comunidades.	de limpieza. Se creó una herramienta de Comunicación Bilingüe. Un taller fue organizado para la reducción de tiraderos clandestinos para la comunidad. La Ciudad planea continuar con su programa de limpieza y las actividades de educación.
3.1.06	**El Equipo de Reciclaje Alamo Nos Incluye a Todos** Implementar "Alamo's Recycling TEAM Includes Everyone" (ARTIE), que se esfuerza por mejorar la gestión de los residuos sólidos en la ciudad	City of Alamo	$54,838	Border 2020	Melissa Gonzales Ciudad del Alamo	Aumentar los esfuerzos del reciclaje por lo menos el 25%. Aumentar la conciencia de la contaminación difusa y soluciones, estableciendo alianzas que promuevan el cuidado del medio ambiente.	Se organizaron varios eventos en diferentes lugares de lo cual 12 presentaciones se realizaron en diferentes escuelas donde participaron 700 estudiantes. Se instalaron letreros bilingües de no tirar basura. El proyecto ya concluyó.
3.1.07	**Saneamiento del Sitio de Disposición Final de Residuos Sólidos Urbanos en Guerrero, Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	3.169 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Regularizar y generar el cumplimiento de la NOM-083-SEMARNAT-2003, referente a la clausura de sitios de disposición final.	Debido al recorte presupuestal llevado a cabo por la Secretaría de Hacienda a la SEMARNAT, el proyecto no se apoyó en el ejercicio 2015. En este año no se gestionó recursos para este proyecto.
3.1.08	**Construcción y Equipamiento de la Primera Etapa del Relleno Sanitario Tipo A en Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	19.359 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Contar con la infraestructura moderna y adecuada para la disposición final de los residuos sólidos urbanos.	Proyecto validado por la SEMARNAT, en trámite documentación para la adjudicación de recursos.

3.1.09	**Construcción y equipamiento de relleno sanitario Tipo A en la Región Carbonífera**	SEMA, SEMARNAT, Municipios de Múzquiz y San Juan de Sabinas	25 Millones Pesos	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construcción y operación.	Conducir estudios de terrenos. En análisis previo a licitación. El proyecto queda pendiente.
3.1.10	**Construcción y Equipamiento de Relleno Sanitario Intermunicipal en los Municipios de Juárez y Progreso, Coahuila**	SEMA, Municipios de Juárez y Progreso	8 Millones Pesos	PEMEX Fondo de Hidrocarburos	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construcción y operación.	En análisis previo a licitación. El proyecto queda pendiente.
3.1.11	**Construcción y equipamiento de dos Estaciones de Transferencia de Residuos Sólidos Urbanos en el Municipio de Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	8 Millones Pesos	PEMEX Fondo de Hidrocarburos	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construcción y operación.	En análisis previo a licitación. El proyecto queda pendiente.
3.1.12	**Programa RECOLECTRÓN** Recolección de residuos electrónicos en los Municipios.	SEMA, Municipios Acuña, Allende, Nava y Sabinas	2 Millones Pesos	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	2015: Reunir 44.91 toneladas 2016: Reunir 56.14 toneladas	Hasta la fecha se han recolectado 44.89 toneladas. El proyecto queda pendiente.
3.1.13	**Disposición Responsable de Llantas** Operación de un centro para la disposición de neumáticos en desuso. Mediante 3 cortes se disminuye el volumen y el riesgo de acumulación de agua que son criaderos de mosquitos (portadores del dengue).	Municipio de Acuña, Coahuila	$12,000	Municipio de Acuña, Coahuila	Biol. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx	Generar una infraestructura municipal para el acopio, manejo y disposición de los neumáticos en desuso.	Se cuenta con un marco normativo que regula el manejo y un programa en marcha para el acopio, pero se requiere la infraestructura para la disposición final. A la fecha se han recolectado y dispuesto más de 50 mil llantas, teniendo como resultado la mitigación del 95% de las enfermedades por los vectores

							transmisores. El proyecto sigue pendiente.
3.1.14	**Disposición de Residuos Peligrosos y Electrónicos** Crear un centro de acopio para residuos de manejo especial, de manera que los pequeños generadores puedan disponer sus residuos de forma final adecuada y conforme a la normativa aplicable.	Municipio de Acuña, Coahuila	$12,500	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx	Generar una infraestructura municipal para el acopio, manejo y disposición de los residuos peligrosos y electrónicos	Marco normativo aprobado por cabildo y modificación al reglamento municipal en materia de medio ambiente para condicionar el funcionamiento mediante licencia de 6 meses y certificación de capacitación. Convenio con CECATI #197 para la certificación. A la fecha han acopiado 29 toneladas; este programa lo llevan a cabo en coordinación con la SEMA. El proyecto sigue en marcha.
3.1.15	**Programa de Manejo de Llantas de Desecho** Diseñar e implementar un programa de manejo para las llantas de desecho y su valorización.	SEDUMA Tamaulipas	$400 Millones Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Trabajar con cada uno de los Ayuntamientos de la frontera norte del Estado para regular sistemáticamente el acopio y almacenamiento temporal de las llantas usadas.	Se ha autorizado en materia de impacto ambiental, dos proyectos en los municipios de Reynosa y Valle Hermoso, mediante los cuales se atenderá un pasivo de 350,000 llantas anuales. El Gobierno del Estado de Tamaulipas, con participación de fondos federales, adquirió una trituradora de llantas con la cual durante los años 2013 a 2016, se han procesado 63,000 llantas en la zona conurbada del Sur del Estado.

3.1.16	**Reforzar Programas de Residuos Sólidos** Diseño de una herramienta de planificación estratégica que cumpla con los Programas Nacionales y Estatales para la Prevención y Gestión de	SEDUMA Tamaulipas	$20,866	Frontera 2020	Oc. Heberto Cavazos Lliteras , SEDUMA, ssma@tamaulipas.gob.mx	Actualizar su sistema de gestión ambiental de residuos sólidos urbanos. Evaluar la gestión de los residuos sólidos urbanos. Preparar un	Se elaboraron dos programas para la Prevención y Gestión Integral de Residuos de Rio Bravo y Valle Hermoso, así como los "Estudios de Generación y Composición de Residuos" de los mismos municipios, dichos documentos de planeación se

	Residuos Sólidos Urbanos en los municipios de Río Bravo y Valle Hermoso, Tamaulipas.					estudio municipal de generación de residuos sólidos.	entregaron a los representantes de los municipios participantes. El proyecto ya concluyó.
3.1.17	**Vamos a Limpiarlo y a Ponerlo Verde** Reducir la disposición ilegal de la basura en todas las zonas de la ciudad, y mejorar la estética general de la ciudad y ofrecer opciones viables de disposición de residuos sólidos para los residentes.	City of Pharr	$36,390	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Ofrecer más eventos de disposición de desechos sólidos, reciclables y llantas. Instalar lugares de acopio de materiales reciclables y en áreas convenientes fuera de la zona. Mejorar el sistema llantas residenciales existentes.	El proyecto organizó varios talleres relacionados al manejo de agua de lluvia y el reciclaje. Se contaron con la participación de estudiantes y residentes. Se usaron las redes sociales y anuncios publicitarios para promover dichas actividades.
3.1.18	**Reciclaje de Residuos Electrónicos** Desarrollar una campaña educacional con el objetivo de reducir electrónicos usados creando un programa integral de reciclaje de residuos electrónicos y difundiendo practicas sustentables	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	$36,054	Frontera 2020	Ing. Victor Ibarra, Instituto Tecnológico de Piedras Negras, ing_victor_m@prodigy.net.mx	Realizar talleres y campañas en escuelas y eventos públicos sobre electrónicos usados.	En Piedras Negras, se instalaron dos centros de acopio en las Instalaciones municipales y se acopió 14145 kilogramos de residuos electronicos. Se visitaron a 18,000 habitantes en 10 colonias de la ciudad y se realizó un taller en materia de RAEE en el ITPN para 55 Asociados de Green Tec-Osos. Se realizó la primera caminata en Marzo 2016 con más de 1200 participantes. Se realizó el Primer Simposio de Impacto Ambiental, Educación Y Salud Ambiental 2016 con la asistencia de 410 docentes y estudiantes de 17 instituciones educativas; el tema de los RAEE fué parte de

							los temas. El proyecto sigue pendiente.
3.1.19	**Reciclaje de Residuos Electrónicos** Informar y educar a la población sobre los beneficios de reutilizar productos de electrónicos usados que incluya un manejo sustentable de equipos electrónicos y prácticas de disposición adecuada	SEMA	$16, 777	Frontera 2020	Oscar Flores, SEMA, 01152844 698-10-91 ext.7268 oscar.flores@sema.gob.mx	Realizar un diagnóstico y capacitación de personal de ecología sobre residuos electrónicos e implementar acciones para su disposición adecuada.	Es el mismo proyecto al que se indica en el 3.1.12. El proyecto sigue pendiente.

Meta #4: Optimizar la preparación conjunta de respuesta ambiental

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objetivo 2: Para el año 2020, por lo menos ocho (8) de los planes conjuntos de contingencia de las ciudades hermanas serán complementados con actividades relacionadas con preparación y prevención, como certificación de la capacitación, análisis de riesgo, y/o desarrollo de capacidades.							
4.2.01	**Actualización del Plan de Contingencias Transfronterizo** Desarrollar un plan de contingencia transfronterizo para el Puente Solidaridad, con la participación de respuesta a emergencias de Colombia (Nuevo León), Nuevo Laredo (Tamaulipas) y Laredo (Texas), reconociendo que Colombia,	Departamento de Bomberos de Laredo, Protección Civil de Nuevo Laredo, CILA, CODEFRONT, y la Ciudad de Laredo		EPA, COCEF, PROFEPA, y Protección Civil	Steve Landin, Departamento de Bomberos de Laredo, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa, Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com	Establecer nuevas reuniones con el personal de las dos ciudades con el fin de revisar el lenguaje del proyecto de revisión y posiblemente desarrollar un lenguaje alternativo e	En una reunión binacional en julio en Nuevo Laredo, los alcaldes de Laredo y Nuevo Laredo aprobaron las versiones finales en inglés y español y firmaron El Plan de Contingencias Transfronterizo. El plan será evaluado por ambas ciudades cada dos años. El plan también especifica que el Departamento de Bomberos de Laredo proveerá asesoría en

	aguas arriba de las otras dos ciudades, es mucho más pequeño y, sin embargo los envíos de materiales peligrosos en la zona se dirigen actualmente a este puente.				01152867 712-46-35	incluir a Colombia en el plan.	caso de una contingencia en el lado mexicano.
4.2.02	**Entrenamiento Binacional en Atención a respuesta a emergencias en materia de Materiales Peligrosos en McAllen-Mission-Pharr, TX y Reynosa, Tamaulipas**	Ciudad de McAllen, Departamento de Bomberos	$75,000	Frontera 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540	Proporcionar la Capacitación de Sistema y Comando de Incidentes a los bomberos de McAllen, Mission, Pharr y Reynosa. Realizar simulacro para poner a prueba la capacitación.	En agosto del 2015, técnicos certificados en el manejo de materiales peligrosos del departamento de bomberos de McAllen y Pharr organizaron un taller con 30 personas de primer nivel de respuestas de Reynosa, San Fernando y Miguel Alemán, Tamaulipas. Un ejercicio de de mesa funcional fue organizado en el puente internacional de Pharr-Reynosa. La lista de contacto del plan de ciudades hermanas fue actualizada.
4.2.03	**Ejercicios Funcionales y de Mesa entre las Ciudades de Harlingen y Matamoros**	City of Harlingen Fire department	$60,000	Border 2020	Rogelio Rubio Harlingen Fire Chief rrubio@myharlingen.us	Llevar a cabo una capacitación en el manejo de materiales peligrosos, ejercicio de mesa y funcional con la colaboración de socorristas de Matamoros y el Comité de Planificación de Emergencias local del Condado de Cameron.	El proyecto se finalizó en el mayo del 2016 con una semana entera de talleres relacionados al manejo de materiales peligrosos concluyendo con el ejercicio funcional de una respuesta de un incidente del cloro. Las ciudades de Harlingen y Matamoros establecieron una respuesta estandarizada en tiempo real de comunicación en el evento de un incidente de materiales peligrosos.

Promover Esfuerzos Transversales Relacionados con la Salud y Educación Ambiental

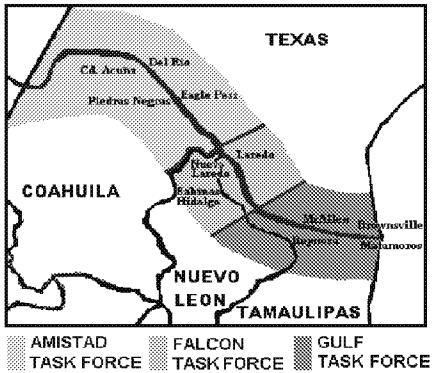
Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Bosque Urbano Piedras Negras**	SEMA, Municipio de Piedras Negras, SEMARNAT	15 Millones Pesos	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Construir un Bosque Urbano en la ciudad de Piedras Negras con superficie de 15 ha.	Se cuenta con un avance del 98% de la obra. El proyecto queda pendiente.
6.0.02	**Fortalecimiento de la Red de los Centros de Educación y Vigilancia Climática Global ¨Casa de la Tierra¨**	SEDUMA, Gobierno Municipal de Reynosa.	66 Millones Pesos	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Construir, equipar y operar 3 Casas de la Tierra para atender la población de Norte, Centro y Sur del Estado. 160 mil visitantes anualmente.	CDT Victoria operando desde diciembre de 2013. CDT Reynosa operando desde enero de 2015. CDT Cd. Madero operando desde el 29 de agosto de 2016.
6.0.03	**Ampliación del Programa de Sistemas de Gestión Ambiental** Ampliar el programa Estatal de Tamaulipas en la promoción de sistemas de gestión ambiental (SIMA) a más escuelas y oficinas de gobierno.	SEDUMA Tamaulipas	682,505 Pesos	SEDUMA, Empresas Participantes	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Implementar y operar sistemas de manejo ambiental (SIMAS) en escuelas y oficinas públicas en los principales municipios.	Con el SIMA (2011-2016) se ha logrado el reciclaje de más de 458 toneladas de residuos (principalmente archivo muerto), evitando la tala de más de 786 mil árboles, un ahorro de 12.4 millones de litros de agua y más de 1 mil 150 m^3 de relleno sanitario no utilizados.
6.0.04	**Modelo de Información para la Planificación de la Salud y Medio Ambiente a lo largo de la Frontera Texas-México** El desarrollo de un marco conceptual para un banco de información ambiental y de salud binacional.	El Colegio de la Frontera del Norte	$39,875	Frontera 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identificar las herramientas y capacidades necesarias, comparar los sistemas existentes,	Se ha trabajado en un marco teórico para la identificación de información en salud y medio ambiente. Se han entrevistado a los diferentes actores claves. Se ha obtenido información sobre indicadores de salud y medio ambiente a través de la elaboración de Memorándums

						identificar y recomendar las necesidades de formación y de aprendizaje, y desarrollar un sistema de indicadores para medir la salud ambiental.	de Entendimiento entre las instituciones académicas involucradas en el proyecto y las respectivas Secretarías de Salud y Medio Ambiente del Estado de Coahuila. El proyecto ya concluyó.
6.0.05	**Educación para la Salud Ambiental para Niños a través de Promotoras** Apoyar el desarrollo de un enfoque integrado para educar a las familias sobre los peligros de la exposición al mercurio, plomo y pesticidas, particularmente los efectos sobre la salud respiratoria, especialmente asma. Estos módulos se utilizarán para proporcionar capacitación a promotoras de salud, que posteriormente proporcionarán información educativa en las escuelas primarias, centros de atención infantil y áreas rurales.	La Amistad AHEC and Southwest Border AHEC	$69,083	Frontera 2020	Rosa Elvira Martinez Southwest Area Border Health Education Center rose.martinez@swbahec.org (830) 758-1111	Llevar a cabo la capacitación y proporcionar información educativa sobre la conciencia de pesticidas en las escuelas primarias y zonas rurales.	El 34% de las casas completaron sus evaluaciones previas en un periodo de siete a ocho semanas y el 14% de las casas completaron su entrenamiento en menos de cuatro semanas. Cada una de las 29 casas completó sus evaluaciones posteriores. Los resultados indican que 27 de las 44 preguntas en las evaluaciones previas y posteriores demuestran una mejora en las puntuaciones y nueve casas se mantuvieron constantes con sus puntuaciones en las evaluaciones previas y posteriores. El proyecto concluyó en diciembre del 2015.
6.0.07	**Reforma Legislativa y Educación Ambiental** Mejorar la implementación de reformas ambientales legislativas intercambiando información sobre reglamentos de cumplimiento de la ley y educación ambiental que mejoren la calidad del aire, cumplimiento ambiental y manejo de residuos sólidos en Laredo y Nuevo Laredo	Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo	$11,000	Frontera 2020	Dr. Juan Herrera Izaguirre, Universidad Autónoma de Tamaulipas, 0115286719-42-50 jaherrera@uat.edu.mx	Actualizar reglamentos ambientales de Nuevo Laredo de acuerdo con reglamentos estatales y federales, desarrollar una base de datos sobre	Se realizó la capacitación para personal de la dirección de Medio Ambiente y Cambio Climático de la localidad respecto al conocimiento de la legislación ambiental, cuidado del agua y reciclaje. En los foros realizados se expusieron los temas de identificación de leyes federales, estatales y

						reglamentos ambientales en municipios fronterizos en Tamaulipas, capacitar a 15 inspectores municipales y personal de ecología sobre reglamentos municipales ambientales, y difundir el manejo sustentable de residuos.	municipales a través del uso de las tecnologías, de igual manera se les explico cómo identificar la jurisdicción de temas de interés como son las Áreas Naturales Protegidas, la contaminación en estos tres niveles competenciales. De igual manera se les d una conferencia sobre la importancia de los cargos que los inspectores realizan y se les hablo sobre el acto administrativo y su relación con la materia ambiental. El proyecto queda pendiente.

BORDER 2020

2013-2014 Action Plan
for the TX-COAH-TAMP-NL Regional Workgroup
October 12, 2012



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
   a. Analyze emissions and emission sources in specific airsheds
   b. Engage in both road-paving and reforestation (using native species)
   c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
   d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
2. Improve water quality by taking the following actions:
   a. Evaluate the portion of the Rio Grande watershed that is in the region
   b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
   c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
   d. Develop more applications for the re-use of water
   e. Reduce non-native species in the water bodies
   f. Continue and expand environmental education efforts such as “Adopt the River” and “Day of the River”
3. Address problems of improper waste disposal:

ED_002319B_00013763-00001

a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
b. Expand environmental education related to waste issues
c. Close and remediate open dumps wherever required by regulation

4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Reduction of energy consumption in buildings and street lighting
2. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
3. Construction of sanitary landfills
4. Attention to waste disposal in gas drilling operations
5. Continuing attention to emergency response
6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
7. Improvement of vehicle inspection programs in Coahuila
8. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Re-use of treated water
2. Monitoring of drilling operations in the Eagle Ford Shale
3. Finalizing the cross-border contingency plan

Gulf Task Force

1. Improvement of water-related infrastructure, and increased attention to wáter conservation and re-use
2. Increased recycling
3. Continuing capacity-building at the local, state, and federal levels of government
4. Technical exchanges, including best practices and lessons learned

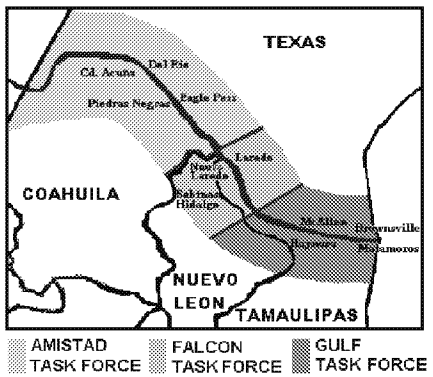
ED_002319B_00013763-00002

Border 2020

2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

B2020 Obj.	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures							
1	Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ	$700,000	SEMA Coahuila	Miguel Ángel Leal Reyes (SEMA) miguel.reyes@sema.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, Monclova, Saltillo and Ramos Arizpe	Planning in progress
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects							
2	Design and implement vehicle emission verification programs or campaigns	SEDUMA	To be defined	SEDUMA/ SEMARNAT	Ing. Salvador Treviño seduma@tamaulipas	Vehicle verification in the border area	By November 2012

ED_002319B_00013763-00003

3	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential	SEDUMA	To be defined	SEDUMA/ SEMARNAT	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	Action plan for 9 wind power projects and state's strategic energy program	Baseline information is being collected
4	Strengthen the state's atmospheric monitoring system	SEDUMA	Por definirse	SEDUMA/ EPA/COCEF	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	By 2014, the system operating at 100% with programmatic consistency standards	Federal resources will be requested
5	Implementation of a environmental management system as a strategy for energy efficiency	SEDUMA/Municipios	$ 100,000	SEDUMA/ EPA/COCEF	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	By 2014, train 100% of the border municipalities	Develop a strategy
6	Implement a competitive grants program aimed at local governments, dedicated to improvements in energy efficiency	University of Texas at Austin, LBJ School	$175,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Complete all projects by August 2013	RFP will be issued in October 2012
7	Initiate 2nd phase of the State Climate Action Plan for Coahuila (PEAC): Quantification of the mitigation public policies selected in the 1rst. Phase.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC	Econometric evaluation of mitigation public policies selected on 1rst. Phase	In early coordination with the state government
8	Initiate 1st phase of the State Climate Action Plan for Tamaulipas (PEAC): Quantification of the mitigation public policies selected in the 1rst. Phase.	Tamaulipas State Government and BECC	$100,000	BECC	Tomás Balarezo, BECC	Selection of a number of prioritized mitigation public policies for climate change.	Work of five technical groups began on July 2012
9	Research the potential for harnessing wind power for electricity in Tamaulipas	SEMARNAT and SEDUMA		SEMARNAT - ill be seeking for funds	Delfino.ramirez@semarnat.tamaulipas.gob.mx	Conduct research and explore business opportunities	Late October 2012 – Forum in Reynosa
10	Research the potential for harnessing wind power for electricity generation in Nuevo León	Secretaría de Desarrollo Sustentable de Nuevo León	$10,000	Fondos Federales/CONACYT	normaarangel@gmail.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	
11	Construct and operate a facility that extracts methane gas from the Nuevo	Municipio de Nuevo Laredo and Setasa	$3.5 million	Private sector; a	Sergio Martínez López	Have the facility in full operation by the end	A feasibility study was completed 2008 with

	Laredo landfill and burns it to generate electricity for the municipality	(Servicios de Tecnología Ambiental S.A.)		company will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	sergiomartinezlopez@hotmail.com	of 2014.	funding from USAID. An RFP for a builder-operator will be issued in early 2013.
12	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty commercial trucks in cross-border trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum	SEMARNAT and the Municipio de Nuevo Laredo	$50,000	EPA Border Grant thru BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program) eduardo.olivares@semarnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program) valencia_osvaldo@hotmail.com	Complete the project by the end of 2014.	
13	Establish an air quality monitoring network in Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	1,400,000	SEMA Coahuila	Miguel Ángel Leal Reyes (SEMA Coahuila) miguel.reyes@sema.ob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila	Planning in progress
14	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Olga Rumayor (SEMA Coahuila) olga.rumayor@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot	Planning in progress

						retrofit technologies.	

Goal # 2: Improve Access to Clean and Safe Water

B 2020 Obj.	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
15	Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant	Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)		SADM, BECC, and National Water Commission	normaarangel@gmail.com y carlos.avila@sadm.gob.mx	Have the plant in operation by the end of 2014	
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
16	Provide Teacher Training Workshop(s) and/or on-site facilitators to implement educational water quality monitoring events in conjunction with 2012/13 World Water Monitoring Challenge.	Texas Partnership for Water Education (TPWE): EPA, WEAT, TAWWA Scout Troops, ISDs, Informal environmental education (EE) providers	Funding needed varies with # of participants: Testing Kits $25/ 30 individuals/ site.	Various funding possibilities will be explored	Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Teachers &/or students, as well as interested community members will have identified monitoring site. Sampling results are submitted to TPWE's WWMC Program Coordinator.	
17	Promote energy management practices among water and wastewater utilities from Laredo to Brownsville, Texas. Conduct quarterly meetings on energy management planning, training on Pumping System Assessment Tool, and on-site energy efficiency assessments. Key cities include Laredo, Roma, Mission, Agua Specialty Utility District, Edinburg, McAllen, Pharr, Weslaco,	Partner with a university to conduct meetings, trainings and on-site energy assessment involving engineering students. 2012 partners are the Texas Manufacturing Assistance Centers at the University of	Funding sought: $75,000/yr or $150,000	Various funding possibilities will be explored	David Reazin, EPA Region 6 (214) 665-7501	Hold quarterly meetings to develop energy management plan and benchmark energy use and costs, 1 PSAT training, and 2 on-site assessments.	

	Mercedes, Harlingen, and Brownsville	Texas at Arlington and University of Texas Pan American.					
18	Organize a workshop in Laredo for water utilities and the restaurant industry to discuss best practices related to abatement of discharges of fats, oils, and grease (will also involve Nuevo Laredo)	City of Laredo water utility, Webb County, and Nuevo Laredo,	$23,000	EPA Border 2012 grant through the BECC	Karla Robles (City of Laredo Utilities) krobles@ci.laredo.tx.us	Hold the workshops by the spring of 2013	Planning in progress
19	Conduct training for small busniness on best practices related to discharges of fats, oils, and grease (will include before and after measures)	Municipio of Reynosa	$16,000	EPA Border 2012 grants through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	Training to be held???	Workplan is being developed
20	Implement a public campaign to increase awareness of problems of non-point -source pollution in the Lower Rio Grande Valley of Texas, through signs posted on roadways and at public facilities, messages on a school district television station, presentations at numerous public events and meetings, and newsletters of various organizations.	15 Lower Rio Grande Valley (LRGV) cities that are members of the Texas Pollution Discharge Elimination System Stormwater Task Force, Texas A&M Kingsville, school districts, and NGOs	$40,000	EPA Border 2012 Grant Program through the BECC	Javier Guerrero (Lower Rio Grande Valley TPDES Stormwater Task Force, Texas A&M University-Kingsville), 956- 457-3023 jguer0351@aol.com	Complete the project by the end of 2013.	As of May 2012, the project team had begun scheduling presentations at events in rural areas.
21 Sub-Obj. 3a	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress	TCEQ, EPA, IBWC, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly.holligan@tceq.texas.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Efforts are being made in 2012 to form the partnership
22 Sub-obj. 2b	Install/upgrade new sewer lines connected to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges to the Rio	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—	Complete the project by summer 2013.	The project was certified by the BECC in

	Grande			(NADB)	COMAPA) carlosmontielsaeb@hotmail.com		July 2012
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
23	Develop & produce region specific supplemental materials necessary to produce a *Waters to the Sea*- Rio Grande module. (*Place- based education with comprehensive watershed focus)*	Center for Global Environmental Education (CGEE)- Hamline University Harte Research Institute @ A&M-Corpus Christi. EPA R6, WEAT, AWWA	Approx $100,000 in 2013 $ 50,000 in 2014	Various funding possibilities will be explored	CGEE- Tracy Fredin Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Recruit & establish an advisory board, produce videos & other materials, identify 1 or 2 ISDs to pilot program, and conduct training for at least 25 teachers in 2014.	Exploratory discussions are underway
24	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila	CEAS Coahuila, SEMA Coahuila	$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Complete the studies by early 2014	
25	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas	SEMA Coahuila, Municipio de Piedras Negras and Municipio de Acuña	$400,000	Coahuila will fund first part and will be seeking funding for the rest	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Begin implementing the campaigns and conclude the agreements by the end of 2014.	
26	Implement a program to remove invasive plant m in the Rio Grande	SEMA Coahuila, CONANP, Profauna	$85,000	SEMA Coahuila, CONANP, Profauna – and will sekk for other funding sources	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sema.gob.mx	By the end of 2014, increase the invasive species plant removal program in the Rio Grande	
27	Organize a regional workshop to disseminate "best practices" related	City of Laredo, EPA, TCEQ, TX Water Development Board,	$6,000	City of Laredo, EPA, TCEQ,	Miguel A. Pescador mpescador@ci.laredo.tx.us	Hold a regional workshop in Laredo by spring 2013, and	

	to water conservation policy, programs – such as EPA's WaterSense program, and public education, and implement enhanced programs in at least one pair of sister cities.	Piedras Negras Technological Institute		and local sponsors,	Debora Browning EPA, Region 6 browning.debora@epa.gov	implement a new campaign in two sister cities by 2014 Enlist 10 new WaterSense Partners	

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

B 2020 Obj.	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
28	Extend the state's environmental management system program (SIMA) to private institutions, schools and shops	SEDUMA	$ 300,000	EPA/SEDUMA/SEMARNAT	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	Reach out to 100% of the border cities	A strategy will be developed
29	Redesign and extend coverage of the E-conexion Newsletter as strategy to share best practices	SEDUMA	$ 30,000	SEDUMA	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	Extend the dissemination of the E-Conexion to 100% of the Tamaulipas municipalities	A strategy will be developed
30	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila	FEDERAL FUNDS FROM SEMARNAT	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarnat.tamaulipas.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013 Hold an information exchange meeting w/Texas 2014	First phase is complete
31	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers and workshops	Cameron County and the Valley Proud Environmental	$10,000	LRGVDC, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council),	Finish the project by the end of 2014.	In progress

	at schools	Council			moviedo@lrgvdc.org (956) 682-3481		
32	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions, and develop and implement a public education campaign regarding illegal dumping in a sixth jurisdiction	The Cities of Pharr, Mission, McAllen, and Mercedes, the Town of Bayview, and Cameron County	$160,000	Lower Rio Grande Valley Development Council, TCEQ, and individual local government	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc.org (956) 682-3481	Finish the six separate but related projects by the end of 2014.	In progress
33	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio de Nuevo Laredo	$5,000	The Gateway Rotary Club and Keep America Beautiful	Lynne Nava (Keep Laredo Beautiful) lnava1@ci.laredo.tx.us	Recruit reps of non-profit organizations and school officials as members and name a board of directors in 2013.	In progress (Need a leader in Nuevo Laredo)
34	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public bins in parks, to include all elementary schools in Nuevo Laredo	Municipio de Nuevo Laredo	???	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program) valencia_osvaldo@hotmail.com	Install the bins at all elementary schools in 2013 and start relevant environmental education programs for students.	In progress
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
35	Design and implement a state scrap tire management program that includes valuation	SEDUMA	$400,000	SEDUMA/ SEMARTANT/EPA	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	Design of public policy and management plan for scrap tires	A study will be conducted
36	Evaluate and take advantage of energy potential of waste in Matamoros landfills	SEDUMA	$ 300,000	SEDUMA/ EPA	Ing. Salvador Treviño seduma@tamaulipas.gob.mx	Complete action plan	Information will be gathered

37	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, TX	Texas A&M University – Kingsville	$15,000	EPA Border Grant thru BECC	Dr. Kim Jones kfkdj00@tamuk.edu	Goals for 2013-2014???	In Progress
38	Implement a collection program for used electronic products	Municipio of Reynosa	$30,000	EPA Border 2012 Grant Program	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	The project will be in full operation by spring 2013	First steps tp initiate program were taken in August 2012
39	Build capacity in scrap-tire management throughout the region	Sustainable Development Secretariat, State of Nuevo León	$35,000	EPA Border Grant thru BECC	Lic. Norma a. Rangel Sevilla	Prepare a "best practices" manual and perhaps hold a regional workshop	Funding already approved by BECC – In progress
40	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening	Sustainable Development Secretariat, SEMARNAT-Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo Nuevo León	normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	Under discussion. New administration may pose roadblocks
41	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	$30,000 ¿?	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	As of April 2012 the equipment had been purchased, and process is being tested.
Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
42	Complete the remediation of old oxidation lagoons	Municipio de Piedras Negras and State of Coahuila environmental agency (SEMA)	$300,000	State of Coahuila environmental agency (SEMA)	Alfredo Lucero (Piedras Negras), aalm68@hotmail.com	Complete the remediation of the remaining 10.3 acres will by the end of 2013, after which the municipality will	Prior to 2012, 19.7 acres of the 30-acre site had been remediated.

						develop a road extension to and a green area at the site.	
43	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass	City of Eagle Pass	$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.us	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Prior to 2012, five acres had been cleaned up and a protective cap constructed.
44	Establish a sustainable management plan for scrap ties in Piedras Negras, Coahuila	SEMA, Municipio de Piedras Negras	$400,000	¿?	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	

Goal #4: Enhance Joint Preparedness for Environmental Response

B2020 Obj.	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
45	Develop an emergency response plan for the maquiladoras in Brecha E-99 in Reynosa,Tamaulipas	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park Mutual Aid Committee)	$10,000	EPA Border Grant thru BECC	Dr. Emilio Sonderegger Arriola emilio.sonderegger@landisgyr.com	???	Project On-Hold
46	Hold a second "knowledge exchange" on risk mapping for first responders on both	Fire departments from Texas and	$30,000(?)	EPA Border 2012 and	Paige Delgado (EPA), Delgado.paige@epa.	Hold the exchange during the first half of	A first exchange was held in July 2012

	sides of the Lower Rio Grande Valley in Texas-Tamaulipas, for the purpose of identifying and gaining access to existing sources of data on hazmat storage and determining additional needs s	Mexican municipalities in the Gulf Task Force area, EPA, TCEQ, Civil Protección Tamaulipas and Mexico Civil Protección		NORTHCOM	gov EPA Region 6	2013	In-progress
47	Hold a binational chemical-spill exercise at Bridge III between Nuevo Laredo, Tamaulipas and Laredo, Texas	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	$5,000	EPA Border Grant thru BECC	Lic. Juan Ernesto Rivera Gómez (Civil Protección de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com or ernestorivera5775@hotmail.com	???	No permit to cross yet – on hold – Bridge #3
48	Develop a joint contingency plan for the Solidarity Bridge that involves first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, which is upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	$5,000 - will be looking for funders	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho, Protección Civil)	Add appropriate information related to the Solidarity Bridge to the Joint Contingehcy Plan for Laredo and Nuevo Laredo by the end of 2013.	Joint mock exercises have taken place.
49	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department) evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo) proteccioncivilnuevol	Hold new meetings of the staff of the two cities in 2013 in order to re-visit the language of the draft revision and possibly develop alternative language.	A draft version of the plan was completed, but the Laredo City Council has postponed approval because of security and personnel concerns

					aredo@hotmail.com		
50	Update and improve the Cross-Border Contingency Plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b)and Del Rio, Texas and Ciudad Acuna, Coahuila, which will include risk analysis and development of risk maps.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de Ciudad Acuña, BECC, and the Rio Grande Institute	$130,000	EPA Border Grant thru BECC	Bill Skeen (Rio Grande Institute), Bskeen@apttx.com	Finalize and sign both revised plans by the end 2013.	In the first half of 2012 the Rio Grande Institute conducted two workshops to seek input on cross-border emergency response protocols and identify transboundary risks.

Multi-Goal Projects

B 2020 Obj.	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Projects Potentially related to Air Quality, Water, Water Quality, and Waste Management							
51	Organize educational campaigns featuring training sessions for health professionals, health students, and promotoras followed by community outreach in the Laredo and Harlingen areas in Texas, addressing how to reduce pre-natal and childhood exposure to pesticides, lead, solvents, second-hand tobacco, and diesel exhaust	The University of Texas Health Science Center in San Antonio	$50,000	EPA Border 2012 Grant Program thru BECC	Claudia Miller, M.D., MillerCS@uthscsa.edu or steer@uthscsa.edu	Complete the project by the end of 2013.	In Progress
52	Conduct educational workshops on safe handling and disposal of pesticides for farm workers in Laredo and the Lower Rio Grande Valley of Texas	Migrants in Action – Weslaco, Texas	$20,000	EPA Border Grant thru BECC	Noemi Ochoa (Association of Farmworker Opportunity Programs), ochoa@afop.org	Complete the project by the end of 2013.	In progress – 1st presentations will take place in Laredo on October 18
53	Identify the sources of environmental health hazards through a "knowledge	Texas A&M Health Science Center,	$50,000	EPA Border 2012 Grant	Genny Carrillo (Texas A&M Health	Hold the "knowledge exchange" workshop	The project began on

	exchange" workshop and establish a binational database on epidemiological data related to these hazards	School of Rural Public Health, PAHO, BECC, HIDA-REY COBINA, Hidalgo County Health Dept.		Program thru BECC	Science Center, School of Rural Public Health), gcarrillo@srph.tamhsc.edu	and establish the database by the end of 2013.	April 1, 2012.
54	Address children's environmental health issues in Laredo, Texas by surveying a sample of homes and identifying health risks, tracking reported exposures through selected hospitals and clinics, developing and implementing a public outreach campaign regarding the identified risks, and identifying and publicizing two relevant online courses available for physicians	Laredo Health Department	$50,000	EPA Border 2012 Grant Program thru BECC	Waldo Lopez (City of Laredo Health Department) wlopez@ci.laredo.tx.us	Complete the project by the end of 2014.	As of May 2012, the project team had started the survey of homes and the tracking of data from hospitals and clinics.

United States
Environmental Protection
Agency

EPA Awards More Than $521,000 for Environmental Projects along the U.S.-Mexico Border

Dallas– As in previous years, the U.S. Environmental Protection Agency's Border 2020 program has awarded more than 521,000 in grants to fund 14 environmental projects, and continue to make strides in conservation and sustainability along the U.S. - Mexico border region. These projects will make a difference and demonstrate innovative solutions to improve lives of our border residents in our border communities.

The funds were awarded in partnership with the Border Environment Cooperation Commission (BECC), under the bi-national U.S.-Mexico Environmental Program: Border 2020. The fourteen projects selected address the public health and environmental protection goals of the Border 2020 Program and are part of the overall environmental funding available to the border region. Additionally, recipient organizations will match with funds over $589,000

The following organizations received grants:

Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C. – Received $50,000.00, for Sustainable and Resilience housing at Juarez's underserved communities

Subsecretaria de Medio Ambiente, Tamaulipas–Received $20,866.00, to strengthen communities' Solid Waste Programs,

Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza – Received $16,777.20 for recycling management and a comprehensive collection system of electronic waste,

City of Harlingen Fire Department – Received $ 60,000 in support of binational tabletop and functional exercise between Harlingen and Matamoros cities,

Instituto Tecnológico de Ciudad Juárez – Received $ 43,204.00, for Green Infrastructure and sustainability at public open space in Ciudad Juarez,

Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología – Received $ 41,388.54 for abatement of wind soil erosion through soil conservation and management practices at range lands in Chihuahua Border livestock lands

Secretaría de Desarrollo Urbano y Medio Ambiente, Tamaluipas – Received $ 9,385.00 for streets lighting energy efficient network in Tamaulipas,

Texas A&M University-Kingsville – Received $38,885.00 for Decision making tool for determining LID Storm water detention

Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras – Received $36,054.00 for a comprehensive recycling management system on collection of electronic waste,

The University of Texas at Austin – Received $58,575.00 for a Rio Grande / Rio Bravo water quality initiative,

Brownsville Public Utilities Board – along with Junta de Aguas y Drenaje de Matamoros, Received $25,000.00 each, for Fat, oil, and grease public outreach educational campaign that control water discharge contamination,

City of Pharr, Recycling Center- Received $36,390.00 for a public Lets Clean it up and Green it up campaign,

Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo – Received $11,000.00 for an Environmental Education and Legislative action reforms,

Message

From: Rincon, Carlos [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1850486E91F24BB88F912FC7A2147A8C-RINCON, CARLOS]
Sent: 3/6/2017 5:17:19 PM
To: Vasquez, Maria [Vasquez.Maria@epa.gov]
CC: Cruz-Diaz, Japhet [cruz-diaz.japhet@epa.gov]
Subject: 300 Commitment Plan initiative by Border Program

From: Rincon, Carlos
Sent: Monday, March 06, 2017 10:16 AM
To: Arturo Blanco (Blanco.Arturo@epa.gov) <Blanco.Arturo@epa.gov>; Rhonda Smith (smith.rhonda@epa.gov) <smith.rhonda@epa.gov>; Sisneros, Maria <sisneros.maria@epa.gov>; Tellez, Debra <Tellez.Debra@epa.gov>
Subject: 300 Commitment Plan initiative by Border Program

Within the US–Mexico border region, Electronic Waste (eWaste) transfer of used electronics to Mexico border communities, Texas is where the highest tons of electronics after it have had its life cycle, crossed from TX to Mexico, mainly through El Paso, Laredo, and the TX Lower Rio Grande Valley's Ports of Entry; through a Private – Public eWaste activity proper disposal of eWaste accordingly to each country's laws and regulations around 45Thousand Tones of e_waste need to be appropriately disposed.

Outcome. - By potentially 45 Thousand Tons of eWaste, tour Goal 3 program has established a binational initiative for collection, recycle metals that have added economic value and disposal of hazardous waste at authorized landfill, protecting air and water as well public health's risk of exposure to cancer and other learning impediment health effects;

Saludos desde El Paso del Norte

Dr. Carlos A Rincón Valdés
US-México EPA Border Office Director
4050 Rio Bravo, Suite 100
El Paso, TX 79902
Tel # 915-533-7273; Mobile # 214-789-1854
rincon.carlos@epa.gov

Project Id	Project Name
20240	Communities United in Prevention of Environmental Pollution
20241	Characterization of drayage activities and emissions in Laredo-Nuevo Laredo airshed
20243	Keeping Pharr Beautiful...Starts at Home
20245	Conservation Arroyo Las Vacas in Acuña, Coahuila, Mexico.
20246	Waste generation Diagnostic in the Noresat border region
20247	Biosolids Recycling in Agriculture in the Valle de Juarez
20248	Urban Keyhole Gardens using Rain Water Harvesting Techniques
20249	Improving the Monitoring of PM10 in Ojinaga
20251	Planning Model for an Environmental and Health Texas/Mexico Border Information Exchange Program
20252	Promotora-Led Environmental Health Education for Children, Eagle Pass, Texas
20253	Management of Fat, Oil and Grease in Nuevo Laredo
20255	Alamo's recycling solid waste systems improvements through a holistic approach.
20256	Tire Amnesty Collection Events in El Paso County
20257	Scrap Tire Collection Program, City of Pharr
20258	Determining the Ideal Bioswale Porous Material for South Texas Stormwater Management

Printed On: February 2, 2016

20260	Sustaining the Environment at the New Mexico-Chihuahua Border
20261	Play: El Moscas Y Los Pesticidas.
20262	Ysleta del Sur Pueblo Community Collection Center
20270	Hazardous Materials First Resppnders Binational Training
20271	Hazardous Railcar Leak Mitigation El Paso_Juarez_Dona Ana Region
20283	Workshop on Energy Efficiency in Public Lighting Systems in Tamaulipas
20285	Comprehensive management project of solid waste in Rio Bravo and Valle Hermoso, Tamaulipas
20286	Comprehensive management of electronic waste project in Piedras Negras and Eagle Pass, Texas
20287	Binational Tabletop and Functional Exercises between the cities of Harlingen and Matamoros
20288	Environmental services in well-managed rangelands of the Chihuahuan Desert
20290	The Rio Grande/Río Bravo Water Quality Initiative

Printed On: February 2, 2016

20291	Fat, Oil and Grease (FOG) Public Outreach Campaign
20293	Law Reform and Environmental Education in Nuevo Laredo
20294	Clean in up program at City of Pharr, Texas
20295	Electronic Waste Management project in Ciudad Acuna, Piedras Negras and Guerrero in Coahuila
20297	Decision Making Tool (DMTG) for Stormwater in The lower Rio Grande Valley in Texas
20298	Sewage sludge and biosolids Agricultural Soils project in the Valle de Juarez
20302	Green Infrastructure in Public Space on Valle del Sol Avenue
20303	Vivienda sustentable y resiliente area poniente en Ciudad Juárez, Chihuahua
20304	Comprenhensive program to improve Air Quality basins in Northen State of Chihuahua

Printed On: February 2, 2016

Project Description	Goal	Status
The purpose of the project is to implement a training program related to proper maintenance of septic tanks in the communities of Montana Vista, Cuadrilla and Valle Bonito in El Paso County Texas	Goal 2	Concluded
A detailed characterization of the activity of the trucks in the region of Laredo-Nuevo Laredo, provide an understanding of the regional activity of the trucks and their implications for air quality, responsible for state and local transportation agencies border and air quality. With this information, decision makers and planners can develop strategies and policies that address the needs of transportation and air quality in the region as a binational regional level. The data, methodologies and information generated by the project could potentially be used to characterize the activities of trucks in other locations along the border.	Goal 1	Concluded
Increase outreach and awareness surrounding illegal dumping, also help the cities beautification efforts by increasing volunteer opportunities and encouraging the labors of community cleanup programs such as Operation Clean Sweep.	Goal 3	Concluded
This project involves the conservation and recovery of Arroyo Las Vacas, this being a tributary of the Rio Grande river which crosses the border city of Acuna.	Goal 2	Concluded
Implement a comprehensive management plan for the management of hazardous solid waste, special handling waste in medium-sized communities in the northeastern state of Nuevo León	Goal 3	Concluded
To determine the effect of biosolids in soils' physical and chemical properties, the plant's agronomic response and the economic return due to reduction in the use of chemical fertilizers and soil and environmental improvements	Goal 3	Concluded
Demonstrate that urban landscapes can incorporate small scale intensive growing beds to grow a variety of plants using rainfall and runoff and very minimal supplemental irrigation.	Goal 2	Concluded
The project is to provide training and training of technical personnel in the municipality of Ojinaga in the operation of the monitoring network of air quality particulate	Goal 1	Concluded
The overall goal of this project is to develop the framework for a system, including processes in phases and specific steps, required for the development of a bi-national environmental and health tracking system.	Goal 2	Concluded
The promotora (community health worker) model will be used for reaching out to parents and care givers, school teachers and child care providers with the aim of improving environments in and around the home, school and childcare facility.	Goal 4	Concluded
Disseminate to all generators of fats and oils as well as proper disposal retainer cleaning grease traps and the consequences that brings pour fats and oils down the drain.	Goal 3	Concluded
Increase the volume of collected recyclables, create environmental stewardships through education, create an identifiable solid waste mascot, and bring together all identifiable stakeholders to bring about holistic change within the community.	Goal 3	Concluded
Hold 4 tire collection Events en El Paso County. Print and Distribute a Flyer on "How To Report Illegal Dumping"	Goal 3	Concluded
The City of Pharr will implement a scrap tire collection event during their monthly Operation "Clean Sweep", community clean up event.	Goal 3	Concluded
To evaluate performance of parking lot bioswale by comparing its stormwater discharges and solids against those of conventional parking lot with no bioswale,to develop the best performing bioswale mixture from the materials tested in the prototype bioswales.	Goal 2	Concluded

Printed On: February 2, 2016

1) Provide three (3) educational presentations to the public, one each in the border cities of Las Cruces, Columbus and Deming; 2)Provide four (4) educational workshops to septic system owners in underserved areas of Luna County; 3)Provide two (2) Knowledge Exchange events for Luna County, one each in Deming and Columbus, on water conservation; 4)Initiate planning efforts for updating the 2002 Columbus/Ascensión/Palomas Sister City Cross Border Contingency Plan	Goal 1	Concluded
As part of the Workers Protection Standard(WPS), EPA Region 6 developed a humorous and educational script (in Spanish) named "El Moscas y Los Pesticidas", consisting of several characters showing how farm workers and their families can prevent exposures to pesticides	Goal 3	Concluded
the project consists in a community collection center that will receive electronic waste (e-waste), household hazardous waste (HHW), used tires and recyclable material.	Goal 3	Concluded
The project objective is to strength the response capacity providing proper training and equipment to hazmat first responders in the areas of McAllen-Mission-Pharr-Reynosa. More than 100 hazardous-material carrying trucks travel through the ports of entry in South Texas. The McAllen Fire Department staff in conjunction with the Mission and Pharr Fire Departments will join forces to work together to update the emergency notification related to hazmat emergencies.	Goal 4	Concluded
The project will enhance the region's capability to mitigate hazardous railcar leaks. The project will involve one day training event, each community will receive kits to provide train the trainer sessions.	Goal 4	Concluded
Train at least 30 public officials from 10 municipalities with basic tools to achieve greater energy efficiency and that this is reflected in a decrease in the emission of greenhouse gases into the atmosphere and in turn into economic savings for municipal utilities	Goal 1	Concluded
The project consists in conduct a Basic Diagnosis on the Comprehensive Management of Municipal Solid Waste in the municipalities of Rio Bravo and Valle Hermoso	Goal 2	Concluded
The project consists of a program of environmental education and health to join efforts in collecting electrical and electronic solid waste in the city of Piedras Negras, Coahuila e Eagle Pass in Texas.	Goal 3	To conclud in September 2017
The City of Harlingen Fire Department, proposes to advance on Goal 4, Objective 2 by the implementation of a hazmat training, a tabletop, and a functional exercise. Proposed Scenario consists of a tanker trailer roll-over accident carrying a petro product spilling into Mexico waterways. The City of Harlingen presnts a sister city agreement since 2014 to support mutual emergency response aid. Project will involve partnering with first responders from Matamoros and Cameron County. The project will help to promote sustainability by practicing the last update of the sister contingency plan to evaluate its reliability.	Goal 4	Concluded
The Universidad Autonoma de Chihuahua, proposes to advance on Goal 1, objective 1 by the implementation of a sustainable solution to mitigate dust control in the areas of Ascension and Palomas in Chihuahua. The proposed solution is to implement a planned pasturage process to grow grassland. Project will implement a baseline monitoring system and training on recovery practices of 68,000 has.	Goal 1	In Progress
The University of Texas at Austin (UT), proposes to advance on Goal 2, Objective 3 by providing information to local binational stakeholders, about sources of water pollution to the Rio Grande and by gathering information from key stakeholders about potential local solutions to the river's water quality problems in the portion of the river between Falcon Dam and the Gulf of Mexico. The project proposes to organize 5 workshops and develop MOU among stakeholders.	Goal 2	In Progress

Printed On: February 2, 2016

The Brownsville Public Utilities Board, a government entity, proposes to advance on Goal 2, Objective 2 by implementing a public FOG campaign, targeting businesses with violations and reaching out to them. It will also provide education through community outreach and public awareness through 4 quarterly workshops. The grant will help leverage funds of $49,561 from the City.	Goal 2	Concluded
The Universidad Autónoma de Tamaulipas, proposes to advance on Goals 2, 3 and 5 by improving the implementation of environmental legislation, strengthen the environmental cooperation and exchange of information between Nuevo Laredo, Tamaulipas and Laredo, Texas, and train environmental inspectors and staff of the municipal environmental unit. The grant will help leverage funds with $5,500 from Universidad Autónoma of Tamaulipas.	Goal 5	In Progress
The project consists in educate City of Pharr residents on environmental sustainability and related proper solid waste disposal methods.	Goal 3	Concluded
Inform and educate residents about the benefits of reusing electronics; the need to practice responsible consumption, as well as the importance of giving an appropriate final destination for these wastes	Goal 4	Concluded
The project will promote specific research and educational topics emphasizing how green infrastructure strategies can be utilized to mitigate stormwater runoff.	Goal 2	In Progress
The project consists in establish a sustainable program that allows the proper disposal of biosolids on agricultural soils in the region.	Goal 3	In Progress
Using green infrastructure techniques establish passive rainwater harvesting systems on a community park in the intersection of Avenue Valle del Sol and Solares street, in Cd. Juarez Chihuahua.	Goal 2	In Progress
Identifying and including green building and infrastructure elements for progressive home building projects in low-income communities of the western area of Ciudad Juarez, The project will seek to identify and include technical assistance services to advance innovative mechanisms, tools, and products (technologies) for building resiliency in housing units. Additionally, t	Goal 2	In Progress
Establish measures for ProAire of the State of Chihuahua from carrying out thematic workshops with the participation of the federal, state and municipal government and the industrial, academic and social sectors.	Goal 1	Concluded

Printed On: February 2, 2016

State	Awarded Amount	RFP	Region
TX	$ 49,776.41	2013	R6
TX	$ 89,750.00	2013	R6
TX	$ 19,830.86	2013	R6
COAH	$ 44,200.00	2013	R6
COAH	$ 17,457.46	2013	R6
CHIH	$ 44,850.00	2013	R6
TX	$ 6,120.08	2013	R6
CHIH	$ 13,375.36	2013	R6
COAH	$ 39,875.00	2013	R6
TX	$ 69,083.50	2013	R6
TAMPS	$ 32,533.00	2013	R6
TX	$ 54,836.16	2013	R6
TX	$ 15,000.00	2013	R6
TX	$ 15,000.00	2013	R6
TX	$ 26,022.00	2013	R6

Printed On: February 2, 2016

NM	$ 36,963.43	2013	R6
NM	$ 20,000.00	2013	R6
TX	$ 66,470.00	2013	R6
TX	$ 45,455.00	2013	R6
TX	$ 30,000.00	2013	R6
TAMPS	$ 9,385.00	2015	R6
TAMPS	$ 20,866.00	2015	R6
COAH	$ 36,054.00	2015	R6
TX	$ 44,683.00	2015	R6
CHIH	$ 41,388.00	2015	R6
TX	58575	2015	R6

Printed On: February 2, 2016

TX	$ 25,000.00	2015	R6
TAMPS	$ 11,000.00	2015	R6
TX	$ 36,390.00	2015	R6
COAH	$ 16,777.20	2015	R6
TX	$ 38,885.00	2015	R6
CHIH	$ 48,510.00	2015	R6
CHIH	$ 43,204.00	2015	R6
CHIH	$ 50,000.00	2015	R6
CHIH	$ 25,000.00	TR2-2016	R6

Printed On: February 2, 2016

BORDER 2012 PROJECTS 2009 – 2011 PROJECTS

This includes TWO Border 2012 RFPs
1) 2009 RFP
2) 2011 RFP - last of the Border 2012 Funds

THREE STATE (TX-CH-NM) BORDER 2012 - 2009 PROJECTS

No	Project ID	Goal	Project Name	Project Outputs/Outcomes	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20-129	2	Adapting Clean Transportation to Urban Areas (Case study: Ciudad Juarez)	Record estimated fuel savings and reduction of CO2 emissions and other pollutants by applying technical-efficient driving policy engine shutdown, the automatic inflation of tires, lubricants, low viscosity and oxidation catalysts. Conduct a workshop to promote "Transporte Limpio". Diffuse "Transporte Limpio" to other border cities.	SEMARNAT [illegible]	[illegible]	[illegible]	[illegible] [illegible]	$ 30,000.00 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final Report submitted on March, 2012 Project Status: COMPLETED
2	20-137	2	Conversion to High Volume-Low Pressure Paint Gun in Ciudad Juarez, Paint Shops	The project aims at reducing COV emissions at car paint shops through implementing the use of high volume low pressure guns in body and paint shops in Ciudad Juarez. Train operating personnel in the use of equipment and new materials. COV's inventory before and after replacing paint guns.	Universidad Autónoma de Ciudad Juárez [illegible]	[illegible]	[illegible]	[illegible] [illegible]	$ 10,210.48 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final report received Dec 11 Project Status: BRA approval received Dec 16, 2011 COMPLETED
3	[illegible]	[illegible]	Environmental Education Project for the Colonia [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	20-243	3	Environmental Sanitation Project for the Communities of Ojinaga, Chihuahua	Removed more than 4,500 m3 of waste from 9,500 homes. Collected 867 scrap tires. Conducted a public campaign to collect household hazardous waste. Held a bi-national workshop on environmental management of waste. Installed a network of PM10 monitors. Reforestation program with 1,200 plants and trees planted.	Ayuntamiento de Ojinaga [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 81,363.00 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final report completed Amount Corrected to 80,363
5	20-137	3	Tire Feasibility Analysis Communities of Ojinaga, Chihuahua	The project focuses on evaluating the implementation of an integral scrap tire management system. Expectations: Feasibility Analysis of a scrap tire management system including a detail analysis of the system components, collection, inventory control, tariff system, awareness campaign, and development of public policy.	Ayuntamiento de Ojinaga [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 9,211.02 [illegible] $ [illegible]	Total Percentage Completed: 100 % Quarterly Reports: June 2011, 3rd received 11/04/11 Project Status: COMPLETED
6	20-243	4	PEST (Positive Education Safety Training Project). Environmental Home Visitation's addressing children's exposure to chemicals	100 families will be safer educated on the importance of home safety and emergency preparedness. Home Detailor will be done with 100 families, the chief environmental home checks will assess what can be improved, and educate on the importance of various health and safety issues.	San Archel Health Center [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 15,000.00 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final Report received 10/10/011 Project Status: COMPLETED
7	20-137	1,2 and 4	Maximizing Resources through Collaboration in Sustaining the New Mexico-Chihuahua Border Environment	Emissions inventory for Columbus Palomas cattle facility. Distribution of information mapping and public meeting summaries for cities of Las Cruces and Deming implementation of control measures. Increased awareness in Juarez public schools to impacts of airborne contaminants. Collection of Chihuahua air quality data. Publish and/or revise existing educational outreach materials in support of water conservation and pollution prevention participation in at least three regional water festivals. Distribution of project education materials during festivals.	New Mexico Environment Department [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 50,000.00 [illegible] $ 50,000.00	Total Percentage Completed: 100% Quarterly Reports: Final report received on July 2012 Project Status: COMPLETED
8	20-241	5	Viva Verde: Living Green for Climate Protection in Southern New Mexico-Northwestern Chihuahua Border Region	Update, expand, translate into Spanish and distribute the Viva Verde Guide in the NM-Chihuahua Task Force Region. Carry out energy efficiency outreach and education. Implement basic weatherization and energy efficiency measures in low-income households.	Site Revision Information Project [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 50,000.00 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final Report received October 4th, 2011 Project Status: COMPLETED
9	20-129	5	Border Energy Forum Outreach and Communications Development	This grant will support the continuation of the United States - Mexico Border Energy Forum and affiliated project development and training opportunities through outreach and communications. The project is intended to increase awareness of the potential for sustainable energy, renewable energy and energy efficiency and the relationship between energy and air quality. The objective of this project is to increase the priority that energy has among policymakers and the general public, by raising awareness of the possibilities of clean energy options and facilitating access to information.	Texas Border Land Office [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 30,074.64 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Project Status: COMPLETED. Pending final invoice.
10	20-129		Assessment of Sustainable Development Possibilities of Mexican Municipalities along the US MX Border	Project will provide: (a) Graphic display of municipal results for Economic, Social, Environmental indexes and the resulting Sustainability Index for the selected border communities.	Utah State University [illegible]	[illegible]	[illegible] [illegible]	[illegible] [illegible]	$ 20,000.00 [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final Report submitted on 11/04/2011 Project Status: COMPLETED

Amount Approved	$	370,238.21
Amount Disbursed	$	369,164.19

ED_002319B_00013800-00002

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2009 PROJECTS

No.	Project ID	Goal	Project Name	Project Outputs/Outcomes	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20,172	1	Dia Del Rio Awareness Campaign Project	Project Goal: to increase awareness by reducing or preventing discharge of harmful material into the river by supporting The Grande event. Expectations: Build a network of several school participants from Mx-US adjacent communities. Develop and coordinate Dia del Rio activities, clean up campaigns and a rally event. Conducting water testing activities at several sites along the river same day at same time.	Rio Grande International Study Center [illegible]	[illegible]	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ 13,296.26 $ [illegible]	Total Percentage Completed: 100% Final Report Completed 1/2/2011 Project Status: Completed
2	20,187	2	Analysis of Electronic Waste's Lifecycle and Waste Management proposal for border cities in Coahuila, Nuevo Leon and Tamaulipas	Project aims at Education on appropriate waste disposal and to provide legal disposal sites for electronic waste on both sides of the border City of Eagle Pass and Piedras Negras. Expectations: Implementation of Public Awareness program by providing presentations to 20 schools in Eagle Pass and 25 schools in Piedras Negras. Agreement and disposal of waste material with ABB recycling and El gran disposal companies at no cost for residents.	Direccion General de Investigacion sobre la Contaminacion Urbana y Regional, Instituto Nacional de Ecologia - SEMARNAT, Mexico [illegible]	[illegible]	[illegible]	[illegible] [illegible]	$ 87,500.00 $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: FR received 12/6/2012 Project Status: COMPLETED
3	20,172	3	Cleanup Actions at the Ejido Guadalupe Scrap Tire Collection Center	To reduce scrap tires inventory (at the present time estimated at +1,700,000 tires) by sending 30,000 scrap tires to a cement kiln in Monterrey, N.L.	Gobierno Municipal de Matamoros Tamaulipas [illegible]	Ejido de Guadalupe, Tamaulipas	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ 30,000.00 $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: FR received in 4/8/2011 Project Status: COMPLETED
4	20,187	[illegible]	Electronic Waste Collection Center	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$ [illegible]	[illegible]
5	20,185	3	Tire Waste Cleanup Program	To collect, store and dispose, at least 20,000 scrap tires monthly, through the exisitng collection stations. To execute the clean up operation of the existing infrastructure to properly dispose the scrap tires from Nuevo Laredo, Tamps	Ayuntamiento de Nuevo Laredo robertogomez@nuevolaredo.gob.mx Arteaga 3900 altos, Sector Aduana, C.P. 88000, Nuevo Laredo, Tamaulipas, Tel. (867) 712-3021	Nuevo Laredo	Mario Constandse (CO)/ Briseida Duarte (PE)	2/28/2012 5 months	$ 50,000.00 $ -	Total Percentage Completed: 85% Quarterly Reports: Received on Oct 2012 Project Status: In progress
6	20,187	3	Hazardous Waste Temporary program in Nuevo Laredo	Activities to performance are essentially: the collection, control and disposal of hazardous waste twice a month over 11 months project duration	Ayuntamiento de Nuevo Laredo [illegible]	Nuevo Laredo	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final Report received 06/08/12 Project Status: Final Report approved. Project including Hazardous Waste Grant to the division of Ecology
7	20,187	3	Electronic Waste Temporary program in Nuevo Laredo	Implement a Program Development to properly manage, collect, control and dispose of electronic waste in the City of Nuevo Laredo	Ayuntamiento de Nuevo Laredo [illegible]	Nuevo Laredo	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ 40,000.00 $ 5,073.36	Total Percentage Completed: 100% Quarterly Reports: Final Report received 06/08/12 Project Status: Final report under review. Awaiting final invoice
8	20,185	3	Implementation of Dump Clean Up and Recycling in "Las Anacuas" area	It is intended to rehabilitate and clean a dumping site called "Las Anacuas" in Reynosa. Recycling of solid waste will also be initiated. Finally, the accumulated solid waste be removed to the local landfill.	Ayuntamiento de Reynosa [illegible]	Reynosa, Tm	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ 30,000.00 $ 28,872.08	Total Percentage Completed: 100% Quarterly Reports: Final Report received 06/08/12 Project Status: Final Report under review
9	20,172	3	Colonias Household Hazardous Waste Collection Project	The project consists a training workshop and collection events on the proper handling of common household hazardous waste including pesticides. Expectations: 2 HHW Collection events. First public information on HHW movements via newspaper and PSA. Training workshop to municipal staff mainly. Set up system to collect, package and transport HHW.	City of Laredo Environmental Services Department [illegible]	Laredo, Tx	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ 35,000.00 $ 35,000.00	Total Percentage Completed: 100% Quarterly Reports: FR received in 6/13/2012 Project Status: COMPLETED. FR sent to EPA for review and comment
10	20,187	2	Electronic Waste Disposal Project	Develop and implement a continuing Public Awareness/Education Program on Electronic Waste Disposal for Eagle Pass and Piedras Negras. Provide some containers for disposal of electronic waste and an outlet to receive electronic waste on both sides of the Border.	City of Eagle Pass, Texas [illegible]	Eagle Pass	Mario Constandse (CO) / Charles Fabian (PE)	[illegible] [illegible]	$ 30,000.00 $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final report received July 2011 Project Status: COMPLETED

ED_002319B_00013800-00003

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2009 PROJECTS

No	Project ID	Goal	Project Name	Project Outputs/Outcomes	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
11	20,125	3	Pharr Recycle Center Public Outreach Program	Develop and implement a continuing Public Awareness/Education Program on Electronic Waste Disposal for Eagle Pass and Piedras Negras. Provide some containers for disposal of electronic waste and an outlet to receive electronic waste on both sides of the Border.	City of Pharr/Public Works Department [illegible]	Pharr, Texas	[illegible]	[illegible] [illegible]	$ [illegible] $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Project Status: COMPLETED. Final Report received December 6, 2011
12	20,124	3	Brownsville-Matamoros Household Hazardous Waste Workshop and Collection Program	Two HHW Collection Event (2 full days events at separate locations). Post public information on HHW safe handling procedures via newspaper & PSA. Training workshop for staff and members of the public. Safely collect, package and transport collected HHW. Determine program's sustainability and community measures.	City of Brownsville [illegible]	Brownsville, Texas	[illegible]	[illegible] [illegible]	$ 30,000.00 $ 19,383.19	Total Percentage Completed: 100% Quarterly Reports: Final report received Sept 19,2012 Project Status: COMPLETED
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$ [illegible]	[illegible]
14	20,130	2	Update to the Brownsville/Matamoros Sister City Plan with training and exercise	The primary goal of the project is to update and expand the scope of the Brownsville-Matamoros Sister City Plan	City of Brownsville [illegible]	Brownsville, Texas	[illegible]	[illegible] [illegible]	$ 30,000.00 $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: FR received in [illegible] Project Status: COMPLETED
15	20,127	ENERGY	Coahuila Climate Action Planning	Build capacity for climate action policy development, planning, analysis, and implementation of a State Climate Action Plan	The Center for Climate Strategies [illegible]	[illegible]	[illegible]	[illegible] [illegible]	$ 50,000.00 $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final Report was received in [illegible] Project Status: COMPLETED
16	[illegible]	ENERGY	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$ [illegible]	[illegible]
17	20,128	3	Hazardous waste management capacity building	To continue the ongoing effort to establish temporary collection sites in the city area to collect and properly dispose household hazardous waste.	Gobierno Municipal de Matamoros Tamaulipas [illegible]	Matamoros, Tamps	[illegible]	[illegible] [illegible]	$ 30,000.00 $ [illegible]	Total Percentage Completed: 100% Quarterly Reports: Final report received 08/2012 Project Status: COMPLETED
18	20,186	2	Centro de Investigación y Educación Ambiental	To support the operation of this educational and research center, through some equipment purchases	Nuevo Laredo Municipal Government	Nuevo Laredo, TAM	Mane Constandse (CO)/ Briselda Duarte (PE)	2/16/2012 4 months	$ 7,000.00 $ -	Total Percentage Completed: 95% Quarterly Reports: Final report Received August 2012 Project Status: waiting for final report update
19	20,179	3	Evaluation of the potential regional marketing of recycled rubber from scrap tires	Develop and inventory of exisitng scraptires users (industry or otherwise) and provide a strategy to develop scrap tire market	ITESM	Nuevo Leon, TAMPS	Mane Constandse (CO)/Alberto Ramirez (PM)	9/23/2011 13 monts	$ 40,000.00 $ 23,281.29	Total Percentage Completed: 60% Quarterly Reports: 2nd QR received on 07/02/12. Project Status: In progress.> Project duration has been extended until January 31st/2013

Amount Approved	$ 558,933.65
Amount Disbursed	$ 408,812.04

Total Approved	$ 929,171.86
Total Disbursed	$ 777,976.23

Updated December 31, 2012

ATTACHMENT "A"

THREE STATE (TX-CH-NM) BORDER 2012 - 2011 PROJECTS

No.	Project ID	Goal	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20197	1	Examination of Risk to Groundwater Aquifers from Onsite Systems	NMSU Dr. Christopher Brown Ph. (575)646-1802 brownch@nmsu.edu	Dona Ana County, NM and Cd. Juarez, Chih.	Marie Constantse (CO)/ Jorge Hernandez (PM)	6/6/2012 18 months	$ 64,921.49 $ 64,921.49	Total Percentage Completed: 100 % Final Report Received February 28, 2014 Project Status: Completed
2	20194	1	Water Conservation Project in Pto. Palomas, Chihuahua, MX	Border Partners Polly Edmonds Ph. 575-546-1083 pxedmonds@gmail.com	Puerto Palomas, Chih.	Marie Constantse (CO)/ Jorge Hernandez (PM)	4/5/2012 15 months	$ 10,000.00 $ 10,000.00	Total Percentage Completed: 100 % Final Report Received October 26, 2013 Project Status: Completed
3	20195	3	Plan Regional de Gestion de Residuos para Ascensión y Janos	REMEXMAR Guim. Ma. del Pilar Leal Tel. 618-6809 pleal@remexmar-juarez.org	Ascensión and Janos, Chih.	Marie Constantse (CO)/ Jorge Hernandez (PM)	6/20/2012 40 months	$ 27,438.63 $ 27,438.63	Total Percentage Completed: 100 % Final Report Received October 13, 2015 Project Status: Completed
4	20210	4	Riesgos Microbiológicos y Químicos que Afectan la Salud Ambiental y Humana en el Valle de Juarez, Chihuahua	UACJ Dr. Juan Pedro Flores Marquez Tel. 668-1800 Ext. 1561 jufloresf@uacj.mx	Valle de Juarez, Chih.	Marie Constantse (CO)/ Alberto Ramirez (PM)	7/30/2012 18 months	$ 67,214.63 $ 67,214.63	Total Percentage Completed:100 % Final Report Recived Sept.18, 2014 Project Status: Completed
5	20197	5	U.S./Mexico Sister Cities Cross Border Contingency Plan Update	RIO GRANDE COUNCIL OF GOVERNMENTS Michael Ada Ph. (915)533-0998 ext. 136 MichaelA@rioacog.org	Presidio, TX and Ojinaga, Chih.	Marie Constantse (CO)/ Briseida Duarte (PM)	4/24/2012 18 months	$ 48,489.29 $ 48,489.29	Total Percentage Completed: 100 % Final Report Received January 30, 2014 Project Status: Completed
6	20215	2	Fostering Binational Environmental Sustainability in the NM/CHIH Border Region	New Mexico Environment Department Thomas Ruiz, Border / NAFED Office: (575) 528-0023 Cell: (575) 544-2519 thomas.ruiz@state.nm.us	NM-CHIH Border Region	Marie Constantse (CO)/ Briseida Duarte (PM)	1/9/2013 19 months	$ 44,562.75 $ 44,562.75	Total Percentage Completed: 100 % Final Report Received June 30, 2014 Project Status: Completed
7	20216	2	MEXICAN BORDER STATES EMISSION INVENTORIES	Western Governors Association Ms. Sara Lang slang@westgov.org 303-623-9378	TX-CHIH Border Region	Marie Constantse (CO)/ Alberto Ramirez (PM)	9/1/2013 5 months	$ 60,000.00 $ 60,000.00	Total Percentage Completed: 100 % Final Report: February 15, 2013 Project Status: Completed
			Comprehensive Program to Improve				5/16/2016	$ 23,850.96	Total Percentage Completed: 100% Final Report: Project Status: Completed. Results: From an analysis of data on air quality recorded by the atmospheric monitoring system, the conclusion is that in Chihuahua City and Ciudad Juarez where monitoring network exist, particles smaller than 10 microns (PM10) exceed current regulations insistently. This report

8	20304	1	Comprehensive Program to Improve Air Quality basins in Northern Chihuahua		Juarez, Chih.	Abril Guiraz (CO) / Jorge Hernandez (PM)	5 months	$ 23,650.96	included up 20 measures, 12 of them are targeted or involved in the emission sources (industry, motor vehicles, shops and services), the last 8 correspond to cross-cutting themes (health, education and environmental communication and institutional strengthening).
						Amount Approved		$ 366,477.74	
						Amount Disbursed		$ 366,477.74	

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2011 PROJECTS

No.	Project ID	Goal	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	2006	1	[illegible]	Ayuntamiento de Reynosa [illegible]	Reynosa, Tam	[illegible]	[illegible]	$ [illegible] $ [illegible]	Total Percentage Completed: [illegible] Quarterly Reports: None Project Status: Project Completed [illegible]
2	2016	3	Waste Tire Reuse Technology for Heavy Duty Bed Construction Applications in Brownsville, TX	Texas A&M University – Kingsville Dr. Kim Jones Ph. (361) 593-2197 kfjdj00@tamuk.edu	Brownsville, TX	Mario Constandse (CO)/ Briseida Duarte (PM)	7/30/2012 16 months	$ 15,000.00 $ 15,000.00	Total Percentage Completed: 100 % Final Report Received September 22, 2013 Project Status: Completed
3	2023	3	Fortalecimiento de capacidad regional en el manejo de llantas desechadas	Secretaría de Desarrollo Lic. Norma a. Rangel Sevilla Secretaria Técnica	Border cities in Chihuahua, Coahuila, Nuevo León and Texas	Mario Constandse (CO)/ Alberto Ramírez (PM)	8/14/2012 12 months	$ 35,590.91 $ 35,590.91	Total Percentage Completed: 100 % Final Report Received Sept. 30, 2013 Project Status: Completed
4	2026	3	Gestión y Manejo de Residuos Electrónicos	SECRETARIA DE OBRAS PUBLICAS DESARROLLO URBANO Y MEDIO AMBIENTE ING. MAURICIO CHALONS SALAZAR ecologiareynosa@hotmail.com 7610805	Reynosa, Tam	Mario Constandse (CO)/ Jorge Hernandez (PM)	11/14/2012 12 months	$ 28,560.18 $ 28,560.18	Total Percentage Completed: 100 % Final Report Received September 5, 2013 Project Status: Completed
5	2031	4	Children's Environmental Health Initiative Laredo	City of Laredo Health Department Hector F. Gonzalez Ph. 956 795 4930 hgonzalez@ci.laredo.tx.us	Laredo, TX and Nuevo Laredo, Tamps	Mario Constandse (CO)/ Alberto Ramirez (PM)	5/2/2012 12 months	$ 33,473.43 $ 33,473.43	Total Percentage Completed: 100 % Final Report Received April 30, 2013 Project Status: Completed
6	2019	4	Development of an Environmental/Epidemiological Database in Texas-Mexico Border	Texas A&M University System Health Science Center, School of Rural Public Health Dr. Gerny Carrillo Zuniga Ph. (956) 668-6321 g-carrillo@srph.tamhsc.edu	Border cities in Texas and Tamaulipas	Mario Constandse (CO)/ Alberto Ramirez (PM)	5/2/2012 16 months	$ 49,996.40 $ 49,996.40	Total Percentage Completed: 100 % Final Report Received January 22, 2014 Project Status: Completed.
7	2022	4	Pesticide Awareness: A Serious Message	Migrants in Action Noemi Ochoa, Executive Director of Migrants in Action	Laredo, TX	Mario Constandse (CO)/ Briseida Duarte (PM)	7/3/2012 16 months	$ 19,990.00 $ 19,990.00	Total Percentage Completed: 100% Final Report Received June 30, 2013 Project Status: Completed
8	2023	4	Reducing Prenatal and Childhood Environmental Exposure Risks Among Hispanic Families	The University of Texas Health Science Center in San Antonio Claudia Miller, M.D., M.S. Phone: (210) 562-6563 Email: MillerCS@uthscsa.edu or eleer@uthscsa.edu	Border cities in South Texas and North Tamaulipas	Mario Constandse (CO)/ Alberto Ramirez (PM)	9/25/2012 16 months	$ 40,749.37 $ 40,749.37	Total Percentage Completed: 100 % Final Report Received August 26, 2014 Project Status: Completed

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2011 PROJECTS

No.	Project ID	Goal	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
10	20203	5	Doubles in Emergency Pitch for Hazardous Industries in Brown Bag at Reynosa, Tamaulipas	CAMPIC (Consejo de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park Mutual Aid Council) [illegible]	[illegible]	[illegible]	[illegible] / [illegible]	$ [illegible] / [illegible]	Total Percentage Completed: [illegible] Quarterly Reports: None Project Status: Project Completed in the amount of $ 16,000. Ignored [illegible] funds [illegible] to Alfa. BECC
11	20205	1	"Cease the Grease" – South Texas FOG Abatement Workshop	City of Laredo Utilities Department Tomas M. Rodriguez, Jr. P.E. trodriguez@ci.laredo.tx.us	Laredo, TX	Mara Constandse (CO)/ Briseida Duarte (PM)	6/14/2012 16 months	$ 22,974.89 $ 22,974.89	Total Percentage Completed: 100 % Final Report Received May 20, 2014 Project Status: Completed
12	20200	5	Conducta de Desechos Químicos En Parque [illegible]	Dirección de Protección Civil y Bomberos de Nuevo Laredo, Tam. [illegible]	[illegible]	[illegible]	[illegible] / [illegible]	$ [illegible] / $ [illegible]	Total Percentage Completed: 95 % [illegible] Quarterly Reports: None Project Status: Project Completed in the amount of $5,000. No Legal permits to erect [illegible] [illegible] Bridge
13	20199	6	LRGV NPS Pollution Awareness - Sign Development and Installation Program	Texas A&M University – Kingsville Kim Jones, Ph.D. Ph. (361) 593-2167, fax (361) 593-2069, e-mail: kkdj00@tamuk.edu	Cameron LO, Weslaco, Edinburg, La Joya, Alton, Mission, Alamo, San Juan and Donna, TX	Mara Constandse (CO)/ Jorge Hernandez (PM)	6/26/2012 16 months	$ 29,518.45 $ 29,518.45	Total Percentage Completed: 100%. Final Report Received February 20, 2014. Project Status: Completed
14	20227	4	Children's Environmental Health Initiative Laredo-Second Phase	City of Laredo Health Department Hector F. Gonzalez Ph. 956 795 4020 hgonzalez@ci.laredo.tx.us	Laredo, TX	April Quiroz (CO)/ Alberto Ramirez (PM)	8/15/2013 8 months	$ 32,728.47 $ 32,728.47	Total Percentage Completed: 100%. Final Report Received Dec. 19, 2013 Project Status: Completed
15	20228	4	Healthy Homes Project	Beatriz Favela, Director SoAHEC at NMSU Las Cruces, NM 88011 (575) 646-2097 bfavela@nmsu.edu	Sunland Park, Deming, Lordsburg, Chaparral, N.M.	April Quiroz (CO)/ Jorge Hernandez (PM)	8/22/2013 8 months	$ 24,720.54 $ 24,720.54	Total Percentage Completed: 100%. Final Report Received March 18, 2014. Project Status: Completed

Amount Approved	$	333,324.64
Amount Disbursed	$	333,324.64

Total Approved	$	699,802.38
Total Disbursed	$	699,802.38

Updated Decemner 31, 2016.

FIRST BORDER 2020 RFP (2013)

2013-2014 PROJECTS SELECTED

Border 2020 Projects
Selected for Funding by EPA/BECC for 2013-2014
FIRST Border 2020 RFP

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 Projects
Selected for Funding by EPA/BECC for 2013-2014
FIRST Border 2020 RFP

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

THREE STATE (TX-CH-NM) BORDER 2020 - 2013 PROJECTS											
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer / Contact Information	Project Location	State	PM	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed		STATUS
1	20249	1	Mejoramiento de la Red de Monitoreo de PM10 en Ojinaga	Municipio de Ojinaga, Chihuahua	Ojinaga	CHIH	JH	4/15/2014	$	13,175.35	**Project Status:** This project concluded on September 2015. Some of the project significant contributions were: * A network of monitoring of PM10 fully functional. * Three training events for technical personnel * Development of a Communications Plan for air quality data through local media and information materials.
				Ing. Miguel Adame Baeza moadameb@hotmail.com, (626)453-2541			AQ	17 months	$	13,175.35	
2	20260	2	Sustaining the Environment at the New Mexico-Chihuahua Border	New Mexico Environment Department	Columbus, Deming	NM	BD	11/4/2014	$	36,953.43	**Project Status:** This project concluded on December 2015. $63,037 dlls. were returned to the grant. Some of the project significant contributions were: * Completion of two presentations on health impacts and effective, low-cost methods for controlling blowing sand and soil. * Completion of four septic maintenance workshops. * Organization of the largest ever water festival held in Columbus, NM.
				Ms. Mary Rose Mary.Rose@state.nm.us			MC	13 months	$	36,953.43	
3	20240	2	Comunidades Unidas en Prevencion de la Contaminacion Ambiental	Adult Youth United Development Association INC	Montana Vista, Cuadrilla, Tornillo	TX	BD	5/1/2014	$	49,776.41	**Project Status:** This project concluded on September 2015. Some of the project significant contributions were: * Training program outreach, 2,332 people *Identification of septic tanks with GIS, 467 houses *Surveys conducted, 462 *Creation of mapping and database in Cuadrilla, Montana Vista, Tornilo, and Valle Bonito at El Paso County
				Olivia Figueroa Executive Director ayudaorg1@yahoo.com (915) 851-0272			AQ	16 months	$	49,776.41	
4	20262	3	Ysleta del Sur Pueblo Community Collection Center	Ysleta del Sur Pueblo	El Paso	TX	JH	10/1/2014	$	65,776.92	**Project Status:** Project finished on April 2016. The main results of the project were: * Collection of a total of 250 ures. * 10,800 pounds of electronic waste collected. 42.35 lbs per household during a 14 month period an estimate of 1.4 lbs per household per month. * 5,420 pounds of recyclables collected. 21.25 lbs per household in a 14 month period an estimate of 4.3 lbs per household per month.
				Evaristo Cruz, ecruz@ydsp-nsn.gob (915)859-7913 ext 7755			MC	18 months	$	65,776.92	
5	20247	3	Reciclaje de Biosolidos en Suelos Agricolas del Valle de Juarez, Chihuahua	Universidad Autónoma de Ciudad Juárez	Valle de Juárez	CHIH	JH	4/13/2014	$	28,329.78	**Project Status:** The Project was concluded on December 2015. Some of the project significant contributions were: The project established a sustainable program on agricultural use of biosolids, through 15 demonstration hectares. Important outputs are: * Establish a program promoting the adoption by farmers on the use of biosolids on agricultural land. * A list of volunteer farmers to continue the application of biosolids on 100 hectares in 2015 * Three field demonstrations, educational materials for 150 producers and agricultural technicians in the region.
				Dr. Juan Pedro Flores Margez Tels. 656-688-1800 ext. 1561, 1976 y 1671			AQ	19 months	$	28,329.78	
				Servicos Agropecuarios Paso del Norte, SC	Valle de Juárez	CHIH	JH	4/1/2014	$	8,406.38	
				Lic. Ana Irene Flores Arras			AQ	19 months	$	8,406.38	

6	20248	**Environmental Health**	Urban Keyhole Gardens using Rain Water Harvesting Techniques	El Paso Water Utilities Ana I. Padilla El Paso Water Utilities Phone: 915.621.2000 Email: apadilla@epwu.org	El Paso	TX	AH AQ	4/7/2015 13 months	$ 6,120.08 $ 6,120.08	**Project Status:** This project concluded on May, 2015. Some of the project significant contributions were: 14 educational events, with a total of 956 attendees. The overall acceptance of the keyhole gardens, as a vegetable gardening option was well received by the public that attended the various workshops. Final report has been submitted and approved.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

$ 251,826.36
$ 208,750.36

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2012 - 2013 PROJECTS											
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer / Contact Information	Project Location	State	PM	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed		STATUS
1	20241	1	Characterizing Drayage Activities and Emissions in Laredo-Nuevo Laredo Airshed	Texas A&M Transportation Institute (TTI) Farzaneh, Reza Research Engineer m-farzaneh@tamu.edu (512) 407-1118	Laredo	TX	JH AQ	9/1/2014 18 months	$ 89,750.00 $ 89,750.00		**Project Status:** The project concluded on March 2016. Some of the project significant contributions were: Important air quality impacts of drayage trucks in the region; specifically, the results show that the Colombia bridge crossing is the most utilized port of entry in the region, and is associated with relatively high emissions caused by high truck volumes and slow speeds, therefore high emissions adjacent to urban area of both Laredos.
2	20258	2	Determining the Ideal Bioswale Material for South Texas Stormwater Management	The University of Texas Pan American Jungseok Ho, Ph.D., P.E. (956) 665-3104, hoj@utpa.edu	Edinburgh	TX	AH AQ	12/1/2014 24 months	$ 26,022.00 $ 23,434.15		**Project Status:** Monitoring will continue and includes a comparison to theoretical calculation of runoff flow rate, comparison with the guidelines and criteria in South Texas, and comparison to independent testing of soil permeability. Project will conclude in the final quarter of 2016, final report is schedule for December 15.
3	20245	2	Conservación del Arroyo Las Vacas en Ciudad Acuña, Coahuila, Mexico	SECRETARIA DE MEDIO AMBIENTE DEL ESTADO DE COAHUILA Alejandra Carrera alejandra.carrera@semarnat.gob.mx (844) 4100014	Acuña	COAH	BD AQ	7/14/2014 22 months	$ 34,605.92 $ 34,605.92		**Project Status:** The project concluded on May 2016. Some of the project significant contributions are: a) Binational group created among SEMA Coahuila, TCEQ, Acuna City, Tec of Acuna, CILA, IBWC, UT Austin CONANP. b) Diagnostic Report with inventory data of existing vegetation and species along the 26km of the Acuña river, GIS maps accessible to the public. c) Close out of 35 wastewater illegal dumping sites in 2015. d) Reforestation with 225 native trees. e) Binational workshop on water quality with Tecnologico de Acuña and Texas A&M at Austin.
4	20246	3	Diagnóstico de generación de residuos en la región fronteriza norte	Secretaría de Desarrollo Sustentable, Gobierno del Estado de Nuevo León Lic. Norma Rangel Sevilla, normaarangel@gmail.com, (81)2033-1930	Sabinas Hidalgo, NL	NL	JH MC	4/1/2014 15 months	$ 17,457.39 $ 17,457.39		**Project Status:** This project concluded on August 2015. Some of the project significant contributions were: * Characterization of waste in the municipality * Generation of a manual on handling e-waste * Action plan developed
5	20243	3	Keeping Pharr Beautiful Starts at Home	City of Pharr, Public Works Department Grace Segovia, M.A. City of Pharr, Public Works Department Phone: (956) 402-4350 grace.segovia@pharr-tx.gov	Pharr	TX	AH AQ	4/7/2014 20 months	$ 19,830.86 $ 19,830.86		**Project Status:** This project concluded on December 2013. Some of the project significant contributions were: * The reduction in illegal dumping cases from 350 in 2013 to 100 in 2014 * The number of tires collected by city workers decreased from 4,991 in 2013 to 4,520 in 2014.

6	20255	3	Alamo Recycling TEAM Includes Everyone (ARTIE)	City of Alamo Melisa Gonzales Storm Water Manager Phone: 956-787-0006 x 140 mgonzales@alamotexas.org	Alamo	TX	AH AO	4/21/2014 24 months	$ $	54,438.00 54,836.16	**Project Status:** Project concluded on May 2016. Some of the significant project contributions are: 1. Development and implementation of a proven sanitation model that can be easily replicated in other drains in Mexicali and other border cities. 2. Established the governance structure for the implementation of this model in other drains in Mexicali that ensures continued collaboration and coordination among government agencies, non-governmental organizations, and community groups. 3. Community members along the International Drain believe, once again, that illegal dumping in the drain can be eliminated.
7	20253	3	Manejo, Gestión y Control de Grasas y Aceites	Comisión Municipal de Agua Potable y Alcantarillado Mariela Flores floresmariela@hotmail.com (867) 712-5399	Nuevo Laredo	TAMPS	BD MC	6/3/2014 17 months	$ $	6,497.10 6,497.10	**Project Status:** This project concluded on February 2016. Some of the project significant contributions were: 449 establishments trained, giving them the necessary tools to establish procedures in its companies to raise their compliance, to strengthen the compromise among employees, creating a synergy with the operator body. 94 of these establishments will continue to be monitor by COMAPA to ensure environmental compliance and 13 establishments set up lats and oils traps. 86% of visited users comply with established procedures and are implementing the strategies presented in the workshops.
8	20252	Environmental Health	Promotora-Led Environmental Health Education for Children	La Amistad AHEC / Southwest Border AHEC Rose Martinez 830.758.1111 rose.martinez@swbahec.org	Eagle Pass	TX	AH MC	6/16/2014 17 months	$ $	69,043.50 69,043.50	**Project Status:** Project concluded on May 2016. Some of the significant project contributions are: 1. Development and implementation of a proven Sanitation Model that can be successfully replicated in other drains in Mexicali and other border cities. 2. Established the governance structure for the implementation of this model in other drains in Mexicali that ensures continued collaboration and coordination among government agencies, non-governmental organizations, and community groups. 3. Community members along the International Drain believe, once again, that illegal dumping in the drain can be eliminated.
9	20251	Environmental Health	Planeación de un Modelo de Información de la frontera Texas/Mexico	El Colegio de la Frontera Norte, A.C. Dr. Felipe Javier Uribe Salas Tel. (878) 782 7207 Texas A&M HSC Dr. Gerry Carrillo Phone: 956.668.6371 gcarrillo@tamhsc.edu	Piedras Negras Piedras Negras	COAH COAH	BD MC BD MC	5/15/2014 18 months 5/15/2014 18 months	$ $ $ $	19,140.15 19,140.15 15,958.30 15,958.30	**Project Status:** The project concluded on April 2016. Some of the project significant contributions are: a) Identification of agencies who manage health information in the region. b) Organization of a working group to discuss the information on environment and health, among: TCEQ, COLEF, SEMA Coahuila, Texas A&M McAllen Campus. c) MOU agreement between Colef and SEMA Coahuila to share health information and define health indicators. d) Diagnostic report with the identification of sources of environmental information with health associated diseases.

BORDER 2020

Moscas y Pesticadas project

(2014-2015)

Funds from another EPA Program(?)

ATTACHMENT- 1

Project ID	Goal	Project Name	Project Outputs/Outcomes	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
20281		Programa de Educación Ambiental – El Mosca y los Pesticidas en sur de Texas y Nuevo México		TELON DE ARENA M.C. Gabriela Chávez Soria Telón de Arena AC Cavelero Lopez 508 Ciudad Juárez, Chih. 32380 Tel. (656) 612-9502 Correo electrónico: gabyvarg@hotmail.com	Tornillo Fabens Anthony in Texas and the New Mexican communities of Chamberino and La Mesa	Mario Constancio /COV Briselda Duarte (PM)	4/10/2014 7 months	$ 12,562.23 $ 12,562.23	Project Status: Project Completed

Updated December 31, 2016

EMERGENCY RESPONSE BORDER 2020 RFP (2014)

2014 PROJECTS SELECTED

CITY OF EL PASO, TEXAS & MCALLEN, TEXAS

10	20270	Environmental Health	McAllen-Mission-Pharr/Reynosa Hazards in Transportation Binational Training and Exercise	City of McAllen Juan Gloria (956)681-2540 jgloria@mcallen.net	McAllen	TX	BD	4/24/2015	$ 45,455.00	**Project Status:** The Project concluded on December 2015. Some of the project significant contributions were: * Update of the Regional Sister City Plan e-directory * Training on HAZMAT response on International border crossing on Sept. 2015.
							MC	5 months	$ 45,455.00	

	$	398,578.22
	$	395,898.53
Total Approved	$	650,404.58
Total Disbursed	$	604,648.89

Updated December 31, 2016

THREE STATE (TX-CH-NM) BORDER 2020 - 2013 PROJECTS								
NO.	PROJECT ID	B2020 GOAL	Name	Project Implementer Contact Information	Project Location	State	Amount Approved Amount Disbursed	STATUS
1	20271	4	Hazardous Railcar Leak Mitigation Training for communities in Dona Ana County, NM/El Paso, TX/Juarez, Chih	City of El Paso Frank Gallegos (915)838-3264 gallegosff@elpasotexas.gov	El Paso	TX	$ 33,000.00 $ 27,909.16	**Project Status:** Project finished on April 2016. The main results of the project were: 1. Conducted three bi-national training events in the use and implementation of the Emergency Response Kit, a.k.a Midland Kit. 2. Training involved actual hazardous railcars provided by BNSF railroad as requested by El Paso Fire Department. 3. Contact information updated between the communities. 4. Project generated six news stories on local television and two articles in local newspapers, the El Paso Times and El Diaro. 5. Approximately 100 firefighters from three states and two nations were trained in the use of the equipment. 6. Over 120 individuals, including instructors, came together for the three day training event held in July 2015. 7.Three "Midland Kits" were purchased with grant funds and distributed to the participating Fire Departments for each community of El Paso, Juarez and Doña Ana County.

Updated June 30, 2016

ED_002319B_00013800-00023

SECOND BORDER 2020 RFP (2015)

2015-2016 PROJECTS SELECTED

Border 2020 Projects Funded in FY15 (Part of Press Release)

The U.S. Environmental Protection Agency (EPA) is awarding more than $521,000 to 14 organizations in Texas, New Mexico and Mexico. The funds will support projects such as conservation, waste collection, water quality protection, recycling expansion, green infrastructure and improving environmental education in the region. The following organizations received grants:

- **Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario, A.C.** – Received $50,000 for sustainable and resilience housing
- **Subsecretaria de Medio Ambiente, Tamaulipas** – Received $20,866 to strengthen solid waste programs
- **Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza** – Received $16,777 for electronic waste recycling
- **City of Harlingen Fire Department** – Received $60,000 to support binational tabletop exercises
- **Instituto Tecnológico de Ciudad Juárez** – Received $43,204 for a green infrastructure and sustainability project
- **Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología** – Received $41,388 for a soil conservation and management project
- **Secretaría de Desarrollo Urbano y Medio Ambiente, Tamaluipas** – Received $9,385 for energy efficient lighting
- **Texas A&M University-Kingsville** – Received $38,885 for storm water improvements
- **Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras** – Received $36,054 for electronic waste recycling
- **The University of Texas at Austin** – Received $58,575 for a water quality improvement initiative
- **Brownsville Public Utilities Board** – Received $25,000 for an educational campaign to help eliminate water discharges
- **Junta de Aguas y Drenaje de Matamoros** – Received $25,000 for an educational campaign to help eliminate water discharges NOT FUNDED AFTER ALL
- **City of Pharr, Recycling Center**- Received $36,390 for a green campaign
- **Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo** – Received $11,000 for Environmental Education and Legislative action reforms

THREE STATE (TX-CHIH-NM) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20288	**Improvements to Environmental Services in Cattle Ranches via Livestock Grazing, Ascensión, Chihuahua.**	Universidad Autónoma de Chihuahua – Facultad de Zootecnia y Ecología	Ascension, Chih.	Briselda Duarte (PM)	**7/15/2016** **7/31/2017**	**$ 41,388.00**	**Project Status:** In progress. Project delayed due to change of project sponsor, from the Autonomous University of Chihuahua to Texas A&M – Kingsville. First meeting with ranchers and collaborators complete; partial development of GIS uploaded, monitoring in progress.

Amount Approved	**$ 41,388.00**
Amount Disbursed	**$ -**

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Project Name	Project Implementer / Contact Information	Project Location	BECC Contract Officer & Project Manager	TAA signed / Period Of Performance	Amount Approved / Amount Disbursed	STATUS
1	20283	**Energy Efficiency Workshop for Public Lighting Systems, Reynosa, Tamaulipas.**	Secretaría de Desarrollo Urbano y Medio Ambiente	Reynosa, Tamps.	Briselda Duarte (PM)	2/22/2016 5/2/2016	$9,330.33 $ 9,330.33	**Project Status:** Concluded on August 2016. Technical training provided to 30 technical officials from the municipalities of Nuevo Laredo, Guerrero, Mier, Miguel Alemán, Camargo, Díaz Ordaz, Reynosa, Río Bravo, Valle Hermoso and Matamoros, Tamaulipas. Thirty (30) energy efficiency guidelines including maintenance recommendations to reduce Kwh electrical consumption were revised.
2	20293	**Legislative Reform and Environmental Education, Nuevo Laredo, Tamaulipas.**	Universidad Autónoma de Tamaulipas en Nuevo Laredo.	Nuevo Laredo, Tamps.	Briselda Duarte (PM)	5/26/2016 5/2/2017	$11,000.00 $ 4,256.92	**Project Status:** On-going Review of the municipal environmental code and identification of opportunities for improvement. Work on logistics for a workshop between Laredo and Nuevo Laredo on two topics: climate change and environmental binational priorities. Continue to implement environmental fairs among elementary schools.
3	20286	**Comprehensive E-Waste Management in Piedras Negras, Coahuila and Eagle Pass, Texas.**	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	Piedras Negras, Coahuila and Eagle Pass, Texas	Jorge Hernandez (PM)	1/21/2016 7/18/2017	$36,054.00 $ 24,287.08	**Project Status:** Project sponsor is completing a material flow analysis and a waste electrical and electronic equipment life cycle analysis. An audiovisual production in Spanish for the town of Piedras Negras is finished. The sponsor is working with the city of Eagle Pass in the e-waste collection campaign's and educational campaign.
4	20290	**The Rio Grande/Río Bravo Water Quality Initiative, Laredo Texas**	The University of Texas at Austin	Laredo, TX.	Briselda Duarte (PM)	2/22/2016 8/31/2017	$58,575.00 $ 3,170.37	**Project Status:** Stakeholders list updated, and survey draft completed. Meetings will be performed in the first quarter of 2017.
5	20291	**Fat, Oil and Grease (FOG) Public Outreach Campaign, Brownsville, Texas**	Brownsville Public Utilities Board	Brownsville, TX.	Briselda Duarte (PM)	2/22/2016 2/2/2017	$25,000.00 $ 8,694.15	**Project Status:** FOG workshops ads ran in the Brownsville Herald and El Nuevo Heraldo newspapers in English and Spanish on May 22nd and May 24th. 1,500 door hangers were distributed, work continued on the digital poster boards. PUB staff has performed 47 public presentations with a total 400 people in attendance.
6	20292	**Awareness and Discharge Control Rules.**	Junta de Agua y Drenaje de la Ciudad de Matamoros	Matamoros, Tamps.	Briselda Duarte (PM)	TBD TBD	$25,000.00	**Project Status:** Concluded due to lack of funds. Project was suspended to reapply for funding in the next RFP, once the municipal program is newly approved.

ED_002319B_00013800-00027

7	20294	**Let's Clean it Up and Green it Up, Pharr, Texas**	City of Pharr, Recycling Center	Pharr, TX.	Jorge Hernandez (PM)	2/22/2016	**$36,390.00**	**Project Status:** The city of Pharr promoted the month of November as Texas Recyclers month. It hosted a newspaper contest with all of Pharr's schools, and included a $500 scholarship for school recycling. The city's firefighters joined the efforts by promoting and participating in monthly cleanups. The project is expected to be finished by mid-April 2017.
						4/2/2017	**$ 27,112.13**	

Amount Approved	**$**	**201,349.33**
Amount Disbursed	**$**	**76,850.98**

Total Approved	**$**	**242,737.33**
Total Disbursed	**$**	**76,850.98**

Updated December 31, 2016

FOUR STATE (TX-COAH-NL-TAMPS) BORDER 2020 - 2015 PROJECTS

No.	Project ID	Goal/ Fund. Stategy	Objective	Project Name	Project Implementer / Contact Information	Amount Approved / Amount Disbursed	STATUS
1	20270	4	2	**Hazardous Materials First Responders Binational Training in McAllen, Mission, Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Juan Gloria (956)681-2540 jgloria@mcallen.net	$ 25,055.00 $ 25,055.00	**Project Status:** Project concluded on February. Some of the significant project contributions are: - Increase hazmat response skills and capabilities to first responders in McAllen, Mission and Pharr Fire Departments and first responders from northern Mexico. - Equipment will also be used in future binational trainings.
2	20285	3	1	**Comprehensive Solid Waste Management Project in Rio Bravo and Valle Hermoso, Tamaulipas**	Secretaria de Medio Ambiente	$ 20,866.00 $ 19,871.16	**Project Status:** The two municipal programs have been completed, and in August 10 and 24 they were presented for approval by the respective city councils. Some of the significant project contributions are: • The generation and waste composition studies allow both communities to know the type and amount of waste generated per inhabitant and could be marketed. The studies also calculate the areas required for the final disposal site according to their generation. • Both programs have been completed, and presented for approval by the respective city councils.
3	20295	3	1	**Interagency coordination for the management of electronic and electrical waste in Ciudad Acuña and Piedras Negras, Coahuila**	Secretaría de Medio Ambiente del Estado de Coahuila de Zaragoza	$ 16,898.67 $ 16,898.67	**Project Status:** The third dissemination campaign was held for the collection of electrical and electronic waste; the campaign was carried out simultaneously in the participating municipalities. Approximately 10,370 kg of electronic waste were collected. Operation of a permanent collection center for used electronic waste in Piedras Negras is in place. Project has collected 57 tons more than the original 25 ton target.

4	20287	4	2	**Binational Tabletop and Functional Exercises between Harlingen, TX and Matamoros, Tamaulipas.**	City of Harlingen Fire Department	$ 44,682.30 $ 44,682.30	**Project status:** The project concluded in August. Some of the significant project contributions are: -Training of 19 officers and students from Harlingen (2), Mission (2), Brownsville (1) and Matamoros (14). -Harlingen and Matamoros have established the ability to implement standardized response and real time communication in the event of Hazardous Materials incidents. -A foundation for enhanced emergency response and cooperative incident management has been created.
5	20297	2	2	**Decision Making Tool (DMT^{G}) for Determining LID Stormwater Detention in Bronwsville, Texas**	Texas A&M University-Kingsville	$ 38,885.00 $ 12,044.74	**Project Satus:** Project sponsor has assured at least twelve (12) local governments are provided with information associated with this project, namely the introduction of the tool. Also assured workshops for continuing education credits for stormwater professionals to encourage attendance at these workshops. Project contract is under review with the new sponsor who is UTRGV.

$	146,386.97
$	118,551.87

$	288,100.97
$	166,574.20

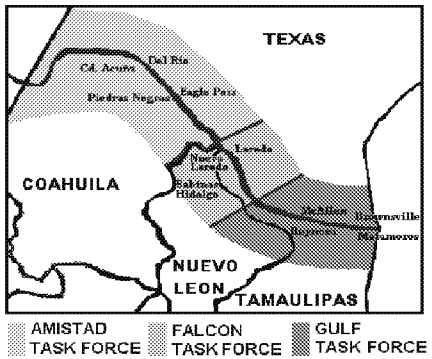
Updated December 31, 2016

BORDER 2020

2017-2018 Amistad Task Force Action Plan

TX-COAH-TAMP-NL Regional Workgroup

October 2017



The Four-State Regional Workgroup is the most complex of the four regional workgroups because of its geographical extension and the number of municipalities. The region includes parts of three states and at least 29 municipalities on the Mexican side and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf--each of which established subject-specific committees related to its priority concerns.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2017-2018 version is the second of its kind. Several projects have been carried over from the 2015-2016 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

In October of 2016, the three task forces held meetings to discuss initial priorities for the 2017-2018 Action Plan as well as several conference calls with leaders to develop a consensus of priorities at the local and regional workgroup levels.

Regional Priorities

Goal 1: Reduce Air Pollution

a) Implement atmospheric monitoring programs under the same criteria of analysis and promote the dissemination of results in the four states
b) Set actions in accordance with the public policies of micro and macro-economic analysis of climate change state programs
c) Promote the implementation of the PROAIRE air quality program and its strategies in the border communities

Goal 2: Improve Access to Clean and Safe Water

a) Continue to improve energy efficiency for water operators in border municipalities
b) Continue the water conservation programs and encourage the reuse of treated water for irrigation
c) Strengthen wastewater sanitation programs and actions
d) Disseminate green infrastructure actions for sustainable development of border communities
e) Promote strategies for adequate wastewater management in Tamaulipas border municipalities

Goal 3: Promote Materials Management and Waste Management, and Clean Sites

a) Increase institutional capacity at the local and state levels for sustainable practices in solid waste management
b) Develop collection and comprehensive waste management programs for used electronics for municipalities in the border area

c) Develop collection and comprehensive waste management programs for proper disposal of household hazardous waste for municipalities in the border area
d) Continue efforts to implement comprehensive scrap tire management programs
e) Strengthen operations of the sanitary landfills in border municipalities, with plans to capture and take advantage of the biogas and convert to energy
f) Develop comprehensive actions to eliminate unauthorized open-air dump sites
g) Encourage municipal programs for holistic waste management
h) Promote the integral waste management in the Mexican municipalities

Goal 4: Enhance Joint Preparedness for Environmental Response

a) Continue the binational relationship in emergency response for training, equipment and drills
b) Promote the creation of risk atlases for waste management and hazardous materials in border communities
c) Carry out the required border studies for the protection of local communities
d) Generate a diagnosis of equipment, training, and ability to respond to an emergency in border municipalities

Goal 5: Enhance Compliance Assurance and Environmental Stewardship

a) Implement binational workshops targeted to environmental enforcement professionals, including ports-of-entry customs professionals, to promote the exchange of information and improve understanding of each country's respective compliance and enforcement programs
b) Promote the updating, sharing and application of municipal environmental regulations in border communities
c) Carry out the land management plans in the states and municipalities along the border region
d) Establish regulatory and operational mechanisms for the control of wild hogs

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

a) Develop a study that identifies the five top main risks on environmental health in border communities

Fundamental Strategies

a) Promote actions and environmental education programs on waste, recycling, water and fauna in the Kickapoo reservation
b) Implement a study related to the handling and disposal of used accumulators and their impact on public health
c) Establish a binational bilingual program for education purposes on environmental and public health topics according to regional priorities.

Amistad Task Force

Goal 1: Reduce Air Pollution

1. Establish and strengthen vehicle emissions programs in Acuña, Piedras Negras and Nava
2. Promote initiatives to develop energy efficiency and reforestation programs in the industrial sector in Acuña and Piedras Negras
3. Promote the implementation of strategies by the SEMARNAT PRO AIRE air quality program in Acuña, Piedras Negras and Nava

Goal 2: Improve Access to Clean and Safe Water

1. Conduct water quality monitoring of tributaries along the Rio Grande in Acuña and Piedras Negras
2. Develop Fats, Oils and Grease (FOG) workshops in Acuña and Piedras Negras, replicating the model in Laredo

3. Promote and develop green infrastructure projects and water conservation programs in Acuña and Piedras Negras

Goal 3: Promote Materials Management, Waste Management and Clean Sites

1. Promote the implementation of integrated solid, household hazardous waste and used electronic programs in Acuña and Piedras Negras
2. Strengthen scrap tire management programs and promote scrap tire reuse for projects in Acuña and Piedras Negras
3. Promote initiatives to develop plastic bag reduction programs in Acuña and Piedras Negras

Goal 4: Enhance Joint Preparedness for Environmental Response

1. Update the directory of emergency response personnel in the Acuña-Del Rio and Eagle Pass-Piedras Negras and develop a knowledge exchange workshop in Eagle Pass
2. Coordinate two emergency response tabletop exercises and joint response drills between Eagle Pass and Piedras Negras and Del Rio and Acuña

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

1. Develop awareness programs on vector borne illnesses such as Zika and Dengue virus in Acuña and Piedras Negras
2. Launch a binational environmental education program on recycling, energy efficiency and water conservation in Eagle Pass and Piedras Negras using social and broadcast media

GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	Objective 2017-2018	Status Complete Ongoing; New for 2017	Progress Towards Target
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC, in Spanish) for Coahuila: quantification of mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Organize meetings with the technical work groups, the advisory group, and the Climate Change Committee.	Ongoing	The project is currently in the Microeconomic and Public Policy Phase for Coahuila. Meetings have been held with the Technical Working Groups, the Advisory Group, and the Climate Change Committee. The Action Plan is ready and is in the process of being published in the Official Journal of the State.
1.5.02		SEMA (Coahuila),	12 Million	SEMARNAT	Santiago Barrios,	Initiate the project. It is		The project has been authorized and is in the review phase prior to

	Air Quality Network in Coahuila Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	Municipalities of Piedras Negras, Acuña, Nava, Sabinas, Saltillo	Pesos		SEMA/Coahuila, santiago.barrios@sema.gob.mx	currently in the review phase prior to bidding.	Ongoing	bidding. Three air monitoring stations were installed and have been operating for a year.

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	Objective 2017-2018	Status Complete Ongoing New for 2017	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.								
2.2.01	**Strategy for reduction and prevention of disasters in Acuña-del Río** The project consists of developing manuals to improve sanitation and stormwater management plans in Cd. Acuña and develop	Universidad Carolina	Total $96,915 (B2020 - $26,035)	BECC – Border 2020 Grant	Cecilia Pelletier Bravo pelletier.cecilia@gmail.com	* Development of a Green Infrastructure Manual * Urban Planning Workshops	New – Funded FY2017 B2020 RFP	New – Funded FY2017 B2020 RFP

	educational projects to reduce environmental risks,.							

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	Objective 2017-2018	Status Complete Ongoing New for 2017	Progress Towards Target
	Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
*3.1.03	**Construction of and Equipment for Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz and Sabinas	25 Millones Pesos	SEMARNAT PEF 2015	Oscar Flores, SEMA, oscar.flores@sema.gob.mx 01152844 698-1091 ext. 7268	Construction and operation.	Complete	Conduct soil studies. Under analysis prior to request for bids. The project is still in progress. The bidding process for the project ended and the technical studies are ready. The construction of the landfill started in September 2017.
*3.1.04	**Construction of and Equipment for a Regional Landfill in the Municipalities**	SEMA, Municipality of Juárez and Progreso	8 Millones Pesos	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, oscar.flores@sema.gob.mx	Construction and operation.	Complete	Under analysis prior to request for bids. The project is still in progress. The construction of the landfill was completed. Municipalities will receive the equipment in September 2017.

	of Juárez and Progreso, Coahuila				01152844 698-1091 ext.7268			
*3.1.05	**Construction of and Equipment for Two Urban Solid Waste Transfer Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	8 Millones Pesos	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, oscar.flores@sema.gob.mx 01152844 698-1091 ext.7268	Construction and operation.	Ongoing	Under analysis prior to request for bids. The project is still in progress. The transfer stations are currently in the bidding process for funds, and will be installed after the construction of a landfill in the coal region
3.1.06	**RECOLECTRÓN Program** Collection program for used electronics in the municipalities. Inform and educate the population of the benefits of reusing used electronic products.	SEMA, Municipalities of Acuña, Allende, Nava and Sabinas	2 Million Pesos $16,777	SEMA Border 2020	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx Oscar Flores, SEMA, 01152844 698-10-91 ext.7268 oscar.flores@sema.gob.mx	Continue collecting tons of waste. Conduct an assessment as well as training of municipal ecology staff on used electronics and implement actions for adequate disposal.	Ongoing	To date 44.89 tons has been collected. More than 442 tons of used electronics was collected, surpassing the goal of 259 tons that was set by the current six-year administration. The project is in progress.
3.1.07	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Using three slices,	Municipality of Acuña, Coahuila	$12,000	Municipio de Acuña, Coahuila	Biól. Carlos Alejandro Flores Diego, Director of Ecology,	Continue collecting tons of waste.	Ongoing	A regulatory framework regulates management and a program is underway for storage, but infrastructure is required for final disposal. The municipio created a certification program for auto body shops and generators that manage

	reduce the volume and risk of standing water, a breeding ground for mosquitoes (vectors for dengue fever).				floresdiegocarlos@yahoo.com.mx 01152877773-1458			scrap tires, which requires these establishments to cut the tires in three pieces to properly dispose them, and maintain their operating license. To date more than 58,000 tires were collected, mitigating about 95% of vectors. The project is in progress.
3.1.08	**Disposal of Used Electronic and Hazardous Waste** Create a storage center for the special management of waste, in which small generators can adequately dispose of items according to norms.	Municipality of Acuña, Coahuila	$12,500	Municipality of Acuña, Coahuila	Biól. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx 01152877773-1458	Continue collecting and disposing of electronic and hazardous waste.	Complete	The regulatory framework was approved by the city council as well as changes to municipal environmental regulations regarding an approval for an operating license for six months and certification of training workshops. To date 29 tons of waste have been collected. The program is carried out in coordination with SEMA. The municipio made an agreement with Promotora Ambiental (PASA)—a waste services provider-- to pick up hazardous and electronic waste from generators in the community. PASA ships the waste to a storage facility in Piedras Negras and to a refinery for final disposal.
3.1.10	**Electronic Waste Recycling** Develop an educational	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	$36,054	Border 2020	Ing. Víctor Ibarra, Instituto Tecnológico de Piedras Negras,	Conduct workshops and campaigns at schools and public events on used electronics.	Complete	Public events on used electronics were conducted in Piedras Negras, resulting in the collection of more than 15 tons in the collection centers that were installed by the municipio.

	campaign aimed at reducing used electronics by creating an integrated electronic waste recycling program and promoting sustainable practices.				ing_victor_m@prodigy.net.mx 01152878135-0185			The Technological Institute of Piedras Negras organized workshops and awareness campaigns on used electronics in more than 16 schools in Piedras Negras and Eagle Pass, training more than 103,500 residents on the proper management of used electronics, which resulted in the collection of more than 61 tons. The project ended in June.

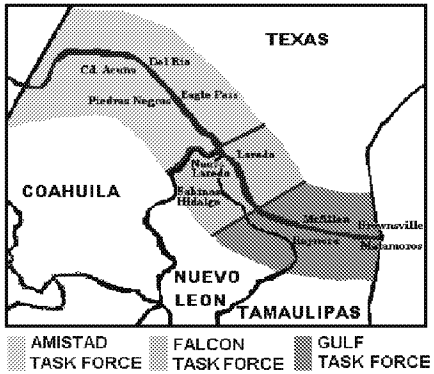
*Projects that are not in the border area

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	Objective 2017-2018	Status Complete Ongoing New for 2017	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management								
6.0.01	**U.S.-Mexico borderlands GIS mapping** Develop the customized and interactive binational philanthropic database and mapping platform.	U.S.-Mexico Border Philanthropy Partnership	Total: $125,510 (B2020 - $25K)	BECC – Border 2020 Grant	Andy Carey Andy@borderpartnership.org	Outputs: U.S.-Mexico Borderlands GIS map; outreach campaign to instruct and inform lin the use of the GIS map in each of	New – Funded under FY2017 B2020 RFP	New – Funded under FY2017 B2020 RFP

	GIS map will identify the names of the foundations, corporations, or government entities are funding in the region, the specific areas of interest and locations all the way down to the community level across the 10 Border State region.					the 10 Border States.		

FRONTERA 2020
Plan de Acción 2015-2016
Grupo de Trabajo Regional TX-COAH-TAMP-NL
Marzo del 2016



El Grupo de Trabajo Regional de los Cuatro Estados es el más complejo de los cuatro grupos regionales, debido a su extensión geográfica y el número de municipios que lo integran. La región incluye partes de los tres estados y por lo menos 29 municipios del lado mexicano y 168 ciudades y centros poblados del lado estadounidense. Reconociendo lo anterior, este grupo de trabajo se dividió en tres equipos de trabajo con un enfoque geográfico: Amistad, Falcón, y el Golfo, cada uno de los cuales ha creado comités para temas específicos relacionados con sus prioridades.

Frontera 2020 tiene cinco metas y los grupos regionales de trabajo proponen proyectos para poner en práctica estos objetivos. A estos proyectos se les da un seguimiento a través de los planes de acción revisables cada dos años. La versión 2015-2016 es el segundo de su tipo. Varios proyectos han sido prorrogados del Plan de Acción 2013-2014, debido a un consenso por parte del grupo de trabajo de los cuatro estados, se incluyó una sexta meta para proyectos de salud y educación. Los proyectos son organizados por Frontera 2020 en metas y objetivos.

Durante el primer semestre de 2015, los tres equipos de trabajo llevaron a cabo reuniones para discutir las prioridades iniciales para el Plan de Acción 2015-2016, así como varias conferencias telefónicas de líderes se celebraron en junio de 2015 para desarrollar un consenso de las prioridades en cada equipo de trabajo y a nivel del grupo regional de trabajo.

Prioridades Regionales

1. Mejorar la calidad del aire a través de los siguientes enfoques:
   a. Incrementar la eficiencia energética a nivel de consumo y el uso de energías renovables en todos los niveles pertinentes
   b. Analizar las emisiones y sus fuentes en cuencas atmosféricas específicas

2. Mejorar la calidad del agua mediante la adopción de las siguientes medidas:
   a. Evaluar la parte de la cuenca del Río Bravo que se encuentra en esta región
   b. Establecer programas de aplicación de la ley para prevenir la contaminación de los cuerpos de agua en el lado mexicano
   c. Mejorar la infraestructura del agua con respecto a respecta a los sistemas de tratamiento y distribución en las zonas rurales

3. Abordar los problemas de la disposición inadecuada de los residuos

4. Ayudar a las comunidades a desarrollar capacidades para los flujos de residuos, mediante la implementación de reciclaje, recolección de residuos peligrosos y electrónicos domésticos y programas de disposición, y el desarrollo de planes integrales para la disposición de llantas de desecho y los mercados alternativos

5. Ampliar la educación ambiental relacionada con el tema de los residuos

6. Mejorar la Preparación Conjunta para la Respuesta Ambiental
   a. Proveer capacitación HAZMAT a personal de respuesta a contingencia locales para reducir la exposición a sustancias químicas como resultado de la emisión de sustancias químicas accidentales y/o derrames
   b. Coordinar ejercicios de mesa de preparación de respuesta a emergencias o en campo

7. Desarrollar un curriculum de salud ambiental certificado para capacitar trabajadores de salud comunitario y promotoras sobre plomo, mercurio, otros metales pesados y pesticidas

Prioridades Individuales de Cada Equipo de Trabajo

Equipo de Trabajo Amistad

1. Generar planes para mitigar los impactos del cambio climático en Coahuila
2. Establecer estaciones de monitoreo de calidad del aire e intercambiar datos con Texas
3. Desarrollar una base de datos para medir las emisiones de las operaciones de fractura hidráulica en Coahuila
4. El aumento del uso de fuentes de energías alternativas y renovables (como el bio gas de relleno sanitario y energía solar)
5. Desarrollar programas de conservación y reutilización de agua para riego en Coahuila
6. Establecer programas de gestión de residuos en diez municipios de Coahuila (incluyendo residuos electrónicos, gestión de residuos peligrosos y su reciclaje)
7. Desarrollar y promover programas de gestión de llantas de desecho, reciclaje y residuos sólidos en la reservación Kikapoo

Equipo de Trabajo Falcón

1. Realizar un estudio sobre el uso del gas metano para la generación de energía en los rellenos sanitarios
2. Monitorear e seguimiento de las operaciones de perforación en el Eagle Ford Shale y en el lado mexicano
3. Finalizar el plan de contingencia transfronteriza
4. Generar estudios y proyectos para la reutilización y la conservación del agua
5. Desarrollar una gestión adecuada, mercados alternativos (como trituradores de neumáticos) y reglamentos para llantas de desecho
6. Establecer programas referentes a residuos electrónicos y residuos peligrosos domésticos en los municipios del Equipo de Trabajo Falcón
7. Desarrollar un estudio de diagnóstico en materia de generación y los mercados alternativos para residuos de la construcción en el Equipo de Trabajo Falcón
8. Desarrollar un taller de trabajo sobre las mejores prácticas relacionadas con la salud pública y los indicadores de educación ambiental

Equipo de Trabajo del Golfo

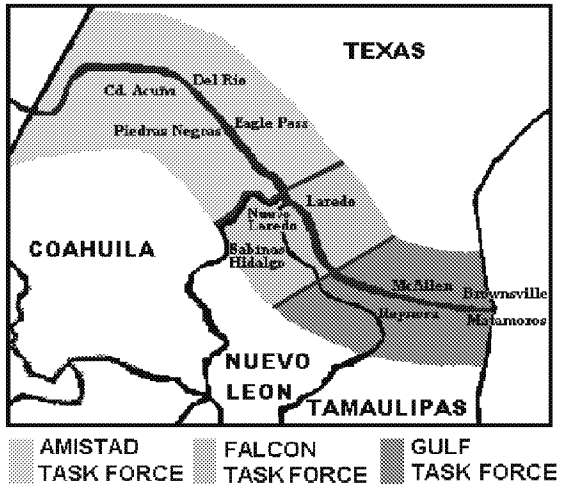
1. Programas para mejorar la eficiencia energética.
2. Educar a la comunidad sobre cómo mejorar la calidad del agua
3. Mejorar o desarrollar programas de gestión para el Pretratamiento Industrial, Grasas y Aceites, y aguas pluviales.
4. Aumentar la conciencia ambiental y la responsabilidad con respecto a efectos de la salud en residentes municipales, comunitarios rurales y colonias populares
   provenientes de los residuos sólidos y las aguas residuales
5. Capacitación para Promotoras en Viviendas Saludables a lo largo de la frontera de Estados Unidos - MX en el Equipo de Trabajo Golfo

Frontera 2020

Esquema del Plan de Acción 2015-2016 del Grupo de Trabajo Regional de los Cuatro Estados

Leyenda:

- Actividad que abarca áreas de por lo menos dos Equipos de Trabajo
- Equipo de Trabajo del Golfo
- Equipo de Trabajo Falcón
- Equipo de Trabajo Amistad



META # 1: Reducir la Contaminación del Aire

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objetivo 3: Para 2018, mantener sistemas eficaz de monitoreo del aire y proveer acceso a los datos cualitativos en tiempo real.							
1.3.01	**Actualización del Programa de Ordenamiento Ecológico de la Región Cuenca de Burgos, Tamaulipas**	SEDUMA	2 Millones Pesos	SEDUMA, SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Formular un Sistema de Monitoreo y Evaluación de los Indicadores Ambientales más relevantes del Ordenamiento Ecológico, considerando el desempeño de estos; definiendo métricas que permitan medir la eficacia de las estrategias y políticas definidas en el ordenamiento.	**Proyecto concluido** Por parte del grupo consultor concluyeron los trabajos de la actualización del programa con las propuestas de modificaciones al modelo de ordenamiento vigente. El estudio actualizado fue revisado y validado por el Comité de Ordenamiento Ecológico de Tamaulipas.

Objetivo 4: Para el año 2020, apoyar la finalización de planes de acciones de cambio climático en cada uno de los seis estados mexicanos norteños fronterizos y construir la capacidad necesaria para garantizar su implementación sustentable.							
1.4.01	**Plan de Acción Climática Municipal de San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	2.199 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Elaboración de un instrumento de planeación de políticas públicas para el desarrollo de acciones y estrategias para mitigar las emisiones de Gases de Efecto Invernadero, reducir la vulnerabilidad del municipio de manera tal que se aumente la capacidad de adaptación al Cambio Climático.	El proyecto no se llevó a cabo debido a que el recurso por parte de la Federación no fue asignado.
	Programa Estatal de Cambio Climático de Tamaulipas	SEDUMA Tamaulipas	$200,000	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Actualizar el inventario de emisiones de gases efecto invernadero y desarrollar la agenda de adaptación al cambio climático.	**Proyecto concluido.** Se concluyó el Programa Estatal de Cambio Climático de Tamaulipas, y fue presentado por el C. Gobernador de Estado en el seno de la Segunda Sesión Ordinaria de la Comisión Intersecretarial de Cambio Climático del Estado de Tamaulipas (CICCTAM). Actualmente, se encuentra en proceso de publicación en el Periódico Oficial del Estado.
1.4.03	**Eficiencia Energética en Sistemas de Alumbramiento Público Municipal de Tamaulipas** Concientizar y sensibilizar al personal técnico sobre la responsabilidad en la operación y uso en las administraciones actuales para el ahorro de energía en	SEDUMA Tamaulipas	$9,385	Border 2020	Ocean. Heberto Cavazos Lliteras SEDUMA Tamaulipas heberto.cavazos@tamaulipas.gob.mx 01 (834) 107-82-60	Capacitar 30 servidores públicos de 10 municipios con herramientas básicas para lograr una mayor eficiencia	**Proyecto concluido.** Se impartieron dos talleres de Eficiencia Energética en Sistemas de Alumbrado Público y en Edificios e Instalaciones Municipales. Se contó con la participación de 30 participantes en total, 17 en

	sistemas de alumbrado y edificios e instalaciones en los 10 municipios fronterizos del estado.					energética y que ello se refleje a su vez un ahorro económico.	el primer taller y 13 en el segundo. De acuerdo a la opinión de los participantes, los talleres les aportaron nuevos conocimientos para la implementación de acciones que les permitan hacer un uso más eficiente de la energía. La población beneficiada de los 10 municipios se estima en **un millón 733 mil 240 habitantes.**
Objetivo 5: Para el año 2020, reducir las emisiones y los impactos asociados por medio de la eficiencia energética y/o proyectos de energía alternativa o renovable.							
1.5.01	**Plan de Acción Climática de Coahuila** Está en proceso la Etapa 2 del Plan Estatal de Acción Climática (PEAC) de Coahuila: Cuantificación de las políticas públicas de mitigación seleccionadas en la Etapa 1.	Gobierno del Estado de Coahuila y COCEF	$275,000	COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Evaluación econométrica de las políticas públicas de mitigación seleccionadas en la Etapa 1.	Se lleva a cabo la Etapa de Análisis Microeconómico de Políticas Públicas para el Estado de Coahuila. Se llevan a cabo reuniones con los Grupos de Trabajo Técnicos, el Grupo Consultivo y el Comité Intersecretarial ante el Cambio Climático. Proyecto en Progreso
1.5.02	**Red de Calidad del Aire en Coahuila** Establecer una red de monitoreo atmosférico en la región de Piedras Negras, Monclova y Saltillo, Coahuila.	SEMA (Coahuila) Municipios de Piedras Negras, Monclova y Saltillo	12 Millones Pesos	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Contar con una red de monitoreo atmosférico en funcionamiento en las regiones de Piedras Negras, Monclova y Saltillo.	El proyecto ha sido autorizado; se encuentra en etapa de revisión previa a la licitación.
1.5.03	**Plan de Acción Climática de Tamaulipas** Está en proceso la Etapa 2 del Plan Estatal de Acción Climática (PEAC) de Tamaulipas: Identificación y Cuantificación de las políticas públicas de mitigación seleccionadas	Gobierno del Estado de Tamaulipas y COCEF	$300,000	COCEF, BID	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Selección de una serie de políticas públicas de mitigación priorizadas para el cambio climático.	**Proyecto concluido.** Se concluyó y presentó el Informe de Identificación de Políticas de Mitigación Prioritarias en el mes de febrero. Actualmente, se encuentra en trámite el ISBN.

	en la Etapa 1.						
1.5.04	**Sistema de Monitoreo Atmosférico** Fortalecer el sistema de monitoreo atmosférico en Tamaulipas	SEDUMA Tamaulipas	Anual: 300,000 Pesos (150,000 Municipal Y 150,000 Estatal)	SEDUMA Ayuntamientos	Biol. Jorge Garcia, jgarciah@tamaulipa.gob.mx 834 1078291	Operar el Sistema de monitoreo al 100% con normas consistentes programáticas.	Se encuentran operando actualmente 8 equipos PM10 (4 Nuevo Laredo, 2 en Victoria, 1 en Madero y 1 en Tampico). Se tiene hecha la gestión para la puesta en operación de 4 equipos más ubicados en la ciudad de Matamoros (enero de 2017). De los muestreos sistemáticos hechos en estas ciudades se ha determinado que la calidad del aire es satisfactoria, toda vez que sus valores se encuentran por debajo de los límites máximos permisibles, de acuerdo a la Normatividad aplicable.
1.5.05	**Taller de Infraestructura Verde**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Capacitar a municipios en el Estado sobre infraestructura verde.	Se llevaron a cabo 2 talleres: uno el 21 de abril del 2015 en donde se atendieron a 5 municipios de la Región Sureste y un taller más realizado el 27 de Mayo del 2015 donde se atendieron a 10 municipios de la Región Centro y Desierto. Se llevó a cabo el Foro de Infraestructura Verde los días 21 y 22 de septiembre con la participación de los estados fronterizos.

Meta # 2: Mejorar el Acceso a Agua Limpia y Potable

Proyecto N°	Descripcion del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto

Objetivo 2: Apoyar a los proveedores de servicios de agua y saneamiento de la región fronteriza en la implementación de prácticas de infraestructura sustentable, con el fin de reducir sus costos operativos, mejorar su eficiencia energética, y promover el uso eficiente del agua y la adaptación al cambio climático.							
2.2.01	**Actualizar la Infraestructura de la Red de Alcantarillado en Nuevo Laredo** Instalar / modernizar las redes de alcantarillado conectadas a la planta de tratamiento de aguas residuales de Nuevo Laredo, para evitar descargas contaminadas al Río Bravo.	COMAPA, Municipio de Nuevo Laredo	$5 Millones	NADB	CP Delfino González, COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Terminar el proyecto para Enero de 2015.	COCEF certificó el proyecto en septiembre del 2012. De las cinco líneas de alcantarillado, uno se completó a mediados del 2014. Los cuatro colectores restantes estaban en reparación y descargan e 1,6 MGD al sistema de aguas pluviales. Otro punto de descarga fue identificado por la COMAPA en el Arroyo La Joya y será reparada. Se encuentra en estos momentos los trabajos la rehabilitación de la red sanitaria, particularmente la desconexión del drenaje sanitario del pluvial y la desconexión de las descargas de aguas residuales a la cuenca del Río Bravo. Proyecto en Progreso
2.2.02	**Gestión de las Grasas y Aceites en Nuevo Laredo** Reducir la concentración de grasas y aceites en los efluentes de las descargas en restaurantes, hoteles y la Industria en la red de Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo Laredo.	$32,533	Frontera 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Realizar talleres de trabajo y seguimiento con los establecimientos comerciales en la implementación del Programa de Manejo de Grasas y Aceites.	COMAPA organizó con apoyo de alumnos de la Universidad Tecnológica una serie de talleres de trabajo para capacitar a residentes y los establecimientos comerciales en las mejores prácticas para el manejo y control de las grasas y aceites generadas. El último taller de trabajo se realizó en agosto de 2015, realizando un recorrido en la Planta Internacional de Tratamiento de Aguas Residuales. Todos los establecimientos que participaron en los talleres de trabajo ya cuentan con un sistema de trampa de grasas y están aplicando las técnicas para el control y manejo de las mismas. **Proyecto concluido**

Objetivo 3: Trabajar en el ámbito binacional para identificar y reducir la contaminación de las aguas superficiales en cuencas o cuerpos acuíferos transfronterizos.							
2.3.01	**Control de Plantas Invasivas** Implementar un programa para eliminar plantas invasoras en el Río Bravo.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Fundación Slim	1.5 Millones Pesos Anuales	SEMA (Coahuila), CONANP, PROFAUNA WWF, Fundación Slim	Alejandra Carrera, SEMA Coahuila alejandra.carrera@sema.gob.mx 01152844 410-0014	Control de plantas: por año en hectares (ha) 2014: *Tamarix* 34 ha y Carrizo 40 ha 2015: *Tamarix* 34 ha y Carrizo 40 ha 2016: *Tamarix* 34 ha y Carrizo 40 ha	PROFAUNA y CONANP con apoyo de WWF y Fundación Slim han controlado durante 2014 y 2015 una superficie anual de 34 ha para la planta Tamarix y 40 para el Carrizo. Proyecto en Progreso
2.3.02	**Conservación del Arroyo Las Vacas** Diseñar e implementar acciones para mejorar la calidad del agua y promover un hábitat adecuado para especies de flora y fauna en el Arroyo Las Vacas.	Ciudad Acuña Dirección de Ecología, SEMA Coahuila	$44,200	Frontera 2020	Lic. Alejandra Carrera, Secretaría de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implementar acciones para mejorar la calidad del agua y promover un hábitat adecuado para especies de flora y fauna en el Arroyo Las Vacas.	La SEMA y TCEQ desarrollaron un proyecto binacional financiado por COCEF para la Conservación del arroyo Las Vacas, el cual dio resultados superiores a los esperados y se consolidó como un proyecto exitoso de largo plazo. Dentro de las últimas actividades del proyecto SEMA y TCEQ organizaron un taller binacional de monitoreo de calidad del agua en octubre del 2015 en la Presa Amistad. Se capacitó a los participantes sobre los programas de monitoreo de Texas y Coahuila, técnicas de muestreo y comparación de datos sobre parámetros de calidad del agua. La SEMA tiene interés en crear un programa de ríos vivos similar al programa de Texas. SEMA y sus contrapartes se llevaron a cabo un muestreo de calidad del agua en 15 sitios de monitoreo por el Arroyo Las Vacas. Los resultados no mostraron fuentes significantes de metales pesados u otros contaminantes. Se realizó una ceremonia de clausura del

							proyecto del Arroyo Las Vacas en Ciudad Acuña en febrero. Se identificaron 441 especies de flora y fauna; se realizó un sistema de información geográfica con los diferentes usos y actividades del sitio; se identificaron y cancelaron 33 puntos de descargas de aguas residuales con efluente a esta cuenca; en materia de reforestación, se plantaron 225 árboles nativos de la región; se generaron documentos de difusión electrónicos y se fortaleció la participación ciudadana con la creación de un Observatorio Ciudadano para la Conservación del arroyo Las Vacas y del del Comité de Conservación del arroyo Las Vacas Se realizó una ceremonia de clausura del proyecto del Arroyo Las Vacas en Ciudad Acuña en febrero. **Proyecto concluido**
2.3.03	**Iniciativa Binacional de Calidad del Agua en el Bajo Río Bravo** Implementar una iniciativa binacional del Río Bravo en materia de Calidad del Agua (de Falcón hasta el Golfo) que caracteriza el estado del río, desarrollando un plan estratégico para mejorar las condiciones ambientales, y proponer un plan de monitoreo para documentar el progreso.	TCEQ, EPA, IBWC, CILA, CONAGUA, y Agencias de los Gobiernos Federal, Estatal, y Local	Budget Total $87,134 Recursos Frontera 2020 $ 58,575	TCEQ, EPA, IBWC, CILA, CONAGUA, y Agencias de los Gobiernos Federal, Estatal y Local	Kelly Holligan , TCEQ, Kelly.holligan@tceq.texas.gov 512-239-2369	Proyecto piloto para hacer frente a los problemas y preocupaciones en el Bajo Río Bravo / Río Grande abajo de la Presa Falcón hasta el Golfo de México a través de la cooperación binacional de calidad del agua. El objetivo es desarrollar un plan binacional basado en la cuenca para reducir los niveles de bacterias en el tramo sur del Río	Reunión Binacional de México y los Estados Unidos para Evaluar y Atender de Manera Conjunta los Aspectos de la Calidad del Agua del Río Bravo en su Tramo Comprendido entre la Presa Falcón y el Golfo de México (Bajo Río Bravo). Celebrada el 28 al 30 de junio de 2016 en Sala B201A Comisión de Texas sobre Calidad Ambiental, 12100 Parque 35 Círculo, Austin, Tx. Objetivo: .Tercera Reunión Binacional sobre el Grupo Técnico sobre la aplicación del modelo de calidad del agua "LA-QUAL" en el Bajo Río Bravo. **Instituciones Participantes**: TCEQ, IMTA, IBWC, CILA, CONAGUA, EPA y

						Bravo	la Universidad de Texas. **Puntos de Acción** Antes de julio 15 se enviaran los datos procesados de abril. Datos de calidad de abril, se enviara al IMTA, TCEQ. Si se recibe la información en estas fechas se tendrá la calibración y la base a finales de julio. El 20 de agosto se tendrá una calibración preliminar del modelo. Se puede comenzar la base de datos a mediados de agosto. Decidirá el grupo técnico cual será el mes para reunirse nuevamente para discutir, verificar y revisar el modelo. Un modelo calibrado, verificador central y sinóptico a finales de agosto. Tenemos en la joya que no está funcionando bien o ampliar las instalaciones, en la PTAR. En Roma tiene desviaciones de sus límites permitidos, por lo que se necesita que los operadores tengan una mejor capacitación. Proyecto en Progreso
2.3.05	**Difusión y Concientización de las Regulaciones para el Control de las Descargas** Promoción y difusión local de reglamentos de descarga entre las partes interesadas para permitir su aplicación y cumplimiento a través de talleres de capacitación.	Junta de Aguas y Drenaje – Matamoros, Tamaulipas	$25,000	Border 2020	Arquelao López JAD Matamoros 868 150-21-30 arkelao57@gmail.com	Trabajar en una ordenanza de descarga de aguas residuales municipales. Realizar talleres educativos sobre el programa de grasas y aceites. Realizar pruebas laboratorio de las aguas residuales en los usuarios comerciales.	Proyecto Cancelado

Meta # 3: Promover la Gestión Integral de Materiales, la Gestión de Residuos y Sitios Limpios

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.02	**Caracterización de Residuos Sólidos Urbanos, Corrientes y Diagnóstico en cuanto a la Generación / Gestión de Residuos** Estudiar y caracterizar el flujo de residuos sólidos urbanos en Sabinas Hidalgo, Nuevo León. Analizar la gestión de la generación de residuos sólidos y "manejo especial" en seis municipios fronterizos de Nuevo León.	Secretaría del Desarrollo Sustentable Nuevo León y el Municipio de Sabinas Hidalgo, Nuevo León	$47,000 US Dólar	Frontera 2020, COCEF	Norma Rangel Sevilla, SDS, Nuevo León, normaarangel@gmail.com 0115281 20 33-19-38	Analizar la generación de residuos sólidos y de "manejo especial" en los seis municipios fronterizos y caracterizar el flujo de residuos sólidos en Sabinas. Completar el estudio en 2015.	El estudio se finalizó en junio de 2015. Más detalles del estudio serán proporcionados en una fecha posterior. **Proyecto concluido.**
3.1.03	**Operación de un Centro de Acopio de Residuos Electrónicos y Peligrosos Generados en las Casas de Habitación**	Municipio de Nuevo Laredo, Tamaulipas	$3.626 Millones Pesos MX	Municipio de Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Generar una infraestructura municipal para el acopio, manejo y disposición de los residuos peligrosos y electrónicos domésticos.	El Centro de Acopio recibió la autorización correspondiente por parte de la Delegación Federal de la SEMARNAT en el Estado de Tamaulipas. Inicio operaciones el día 8 de Junio de 2016. Cabe destacar que este es el único Centro de Acopio de Residuos Peligrosos Domésticos Municipal en México. Proyecto en Progreso
3.1.04	**Ordenamiento Ambiental para la Disposición de Residuos de la Construcción**	Municipio de Nuevo Laredo, Tamaulipas	El proyecto se opera con los recursos que paga el ciudadano	Municipio de Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.co	Generar una alternativa en la comunidad para la disposición de los residuos de construcción y	Este proyecto ha operado en forma continua, generando un impacto importante por parte de la comunidad. Se paga 123 pesos por m3 cuando el residuo no es mayor a

			por el manejo y gestión de los residuos.		m	mitigar los tiraderos clandestinos de este tipo de residuos.	2 m3. Si es de 3-10 m3 el servicio les cuesta 88 pesos. Si rebasa los 10 m3, por salir del programa se les cobra 100 pesos el m3. Se han dispuesto 3520 toneladas y atendido 1028 solicitudes. Proyecto en Progreso
3.1.07	**Saneamiento del Sitio de Disposición Final de Residuos Sólidos Urbanos en Guerrero, Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	3.169 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Regularizar y generar el cumplimiento de la NOM-083-SEMARNAT-2003, referente a la clausura de sitios de disposición final.	Debido al recorte presupuestal llevado a cabo por la Secretaría de Hacienda a la SEMARNAT, el Proyecto no se apoyó en el ejercicio 2015. En este año no se gestionó recursos para este proyecto.
3.1.08	**Construcción y Equipamiento de la Primera Etapa del Relleno Sanitario Tipo A en Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	19.359 Millones Pesos	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Contar con la infraestructura moderna y adecuada para la disposición final de los residuos sólidos urbanos.	Debido al recorte presupuestal llevado a cabo por la Secretaría de Hacienda a la SEMARNAT, el Proyecto no se apoyó en los ejercicios 2015 y 2016.
3.1.09	**Construcción y equipamiento de relleno sanitario Tipo A en la Región Carbonífera**	SEMA, SEMARNAT, Municipios de Múzquiz y San Juan de Sabinas	25 Millones Pesos	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construcción y operación.	Conducir estudios de terrenos. En análisis previo a licitación. Proyecto en Progreso
3.1.10	**Construcción y Equipamiento de Relleno Sanitario Intermunicipal en los Municipios de Juárez y Progreso, Coahuila**	SEMA, Municipios de Juárez y Progreso	8 Millones Pesos	PEMEX Fondo de Hidrocarburos	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construcción y operación.	En análisis previo a licitación. Proyecto en Progreso
3.1.11	**Construcción y equipamiento de dos Estaciones de Transferencia de Residuos Sólidos Urbanos en el Municipio de Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	8 Millones Pesos	PEMEX Fondo de Hidrocarburos	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construcción y operación.	En análisis previo a licitación. Proyecto en Progreso

3.1.12	**Programa RECOLECTRÓN** Recolección de residuos electrónicos en los Municipios.	SEMA, Municipios Acuña, Allende, Nava y Sabinas	2 Millones Pesos	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	2015: Reunir 44.91 toneladas 2016: Reunir 56.14 toneladas	Hasta la fecha se han recolectado 44.89 toneladas. Proyecto en Progreso
3.1.13	**Disposición Responsable de Llantas** Operación de un centro para la disposición de neumáticos en desuso. Mediante 3 cortes se disminuye el volumen y el riesgo de acumulación de agua que son criaderos de mosquitos (portadores del dengue).	Municipio de Acuña, Coahuila	$12,000	Municipio de Acuña, Coahuila	Biol. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx	Generar una infraestructura municipal para el acopio, manejo y disposición de los neumáticos en desuso.	Se cuenta con un marco normativo que regula el manejo y un programa en marcha para el acopio, pero se requiere la infraestructura para la disposición final. A la fecha se han recolectado y dispuesto más de 50 mil llantas, teniendo como resultado la mitigación del 95% de las enfermedades por los vectores transmisores. Estas acciones se han implementado particularmente en las periferias de la ciudad. Proyecto en Progreso
3.1.14	**Disposición de Residuos Peligrosos y Electrónicos** Crear un centro de acopio para residuos de manejo especial, de manera que los pequeños generadores puedan disponer sus residuos de forma final adecuada y conforme a la normativa aplicable.	Municipio de Acuña, Coahuila	$12,500	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx	Generar una infraestructura municipal para el acopio, manejo y disposición de los residuos peligrosos y electrónicos	Marco normativo aprobado por cabildo y modificación al reglamento municipal en materia de medio ambiente para condicionar el funcionamiento mediante licencia de 6 meses y certificación de capacitación. Convenio con CECATI #197 para la certificación. Actualmente están en proceso de conseguir recursos para la construcción del Centro de Acopio de Residuos Peligrosos y se encuentran en el diseño de las instalaciones. La mayoría de los centros de servicio que generan este tipo de residuos los tienen identificados y los sitios de disposición a través de empresas autorizadas. Están fomentando el

							correcto manejo y gestión de estos residuos. En lo referente a los residuos electrónicos, cuentan con un Centro de Acopio Permanente que a la fecha han acopiado 29 toneladas; este programa lo llevan a cabo en coordinación con la SEMA. Proyecto en Progreso
3.1.15	**Programa de Manejo de Llantas de Desecho** Diseñar e implementar un programa de manejo para las llantas de desecho y su valorización.	SEDUMA Tamaulipas	$400 Millones Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Trabajar con cada uno de los Ayuntamientos de la frontera norte del Estado para regular sistemáticamente el acopio y almacenamiento temporal de las llantas usadas.	Se ha autorizado en materia de impacto ambiental, dos proyectos en los municipios de Reynosa y Valle Hermoso, mediante los cuales se atenderá un pasivo de 350,000 llantas anuales, mismas que serán empleadas para su trituración y revalorización energética; asimismo, el Gobierno del Estado de Tamaulipas, con participación de fondos federales, adquirió una trituradora de llantas con la cual durante los años 2013 a 2016, se han procesado 63,000 llantas en la zona conurbada del Sur del Estado.
3.1.16	**Reforzar Programas de Residuos Sólidos** Diseño de una herramienta de planificación estratégica que cumpla con los Programas Nacionales y Estatales para la Prevención y Gestión de Residuos Sólidos Urbanos en los municipios de Río Bravo y Valle Hermoso, Tamaulipas.	SEDUMA Tamaulipas	$20,866	Frontera 2020	Oc. Heberto Cavazos Lliteras , SEDUMA, ssma@tamaulipas.gob.mx	Actualizar su sistema de gestión ambiental de residuos sólidos urbanos. Evaluar la gestión de los residuos sólidos urbanos. Preparar un estudio municipal de generación de residuos sólidos.	**Proyecto concluido**. Proyecto aprobado a través de convenio entre COCEF–Frontera 2020/GET. Se elaboraron dos Programas para la Prevención y Gestión Integral de Residuos de Rio Bravo y Valle Hermoso, así como los Estudios de Generación y Composición de Residuos de los mismos municipios, dichos documentos de planeación se entregaron a los representantes de los municipios participantes.

3.1.18	**Reciclaje de Residuos Electrónicos** Desarrollar una campaña educacional con el objetivo de reducir electrónicos usados creando un programa integral de reciclaje de residuos electrónicos y difundiendo practicas sustentables	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	$36,054	Frontera 2020	Ing. Victor Ibarra, Instituto Tecnológico de Piedras Negras, ing_victor_m@prodigy.net.mx	Realizar talleres y campañas en escuelas y eventos públicos sobre electrónicos usados.	En Piedras Negras, Coahuila se instalaron dos centros de acopio en las Instalaciones municipales y se acopió 14145 kilogramos de RAEE (Residuos de aparatos eléctricos y electrónicos). Se visitaron a 18,000 habitantes en 10 colonias de la ciudad y se realizó un taller en materia de RAEE en el ITPN para 55 Asociados de Green Tec-Osos Efecto . Esta pendiente el ciclo de conferencias a efectuarse en Oct.-Nov 2016. Se realizó la primera caminata en Marzo 2016 con más de 1200 participantes. En la ciudad de Eagle Pass, Texas se estableció el centro de acopio permanente en el Departamento de obras públicas de la ciudad, específicamente en el área de reciclaje. Se estableció la actividad para que durante todo el mes de abril se recogieran en las 54 colonias de la ciudad todos los desechos de RAEE. Se logró recolectar 3696 kilogramos de RAEE. La ciudad se dividió en 3 secciones y se atendieron a 29,000 habitantes. Se realizó el Primer Simposio de Impacto Ambiental, Educación Y Salud Ambiental 2016 con la asistencia de 410 docentes y estudiantes de 17 instituciones educativas; el tema de los RAEE fué parte de los temas. Proyecto en Progreso
3.1.19	**Reciclaje de Residuos Electrónicos**	SEMA	$16, 777	Frontera 2020	Oscar Flores, SEMA, 01152844 698-10-91 ext.7268 oscar.flores@sema.go	Realizar un diagnóstico y capacitación de	Proyecto en Progreso Es el mismo proyecto al que se indica en el 3.1.12

	Informar y educar a la población sobre los beneficios de reutilizar productos de electrónicos usados que incluya un manejo sustentable de equipos electrónicos y prácticas de disposición adecuada				b.mx	personal de ecología sobre residuos electrónicos e implementar acciones para su disposición adecuada.	

Meta #4: Optimizar la preparación conjunta de respuesta ambiental

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Objetivo 2: Para el año 2020, por lo menos ocho (8) de los planes conjuntos de contingencia de las ciudades hermanas serán complementados con actividades relacionadas con preparación y prevención, como certificación de la capacitación, análisis de riesgo, y/o desarrollo de capacidades.							
4.2.01	**Actualización del Plan de Contingencias Transfronterizo** Desarrollar un plan de contingencia transfronterizo para el Puente Solidaridad, con la participación de respuesta a emergencias de Colombia (Nuevo León), Nuevo Laredo (Tamaulipas) y Laredo (Texas), reconociendo que Colombia, aguas arriba de las otras dos ciudades, es mucho más pequeño y, sin embargo los envíos de materiales peligrosos en la zona se dirigen actualmente a este puente.	Departamento de Bomberos de Laredo, Protección Civil de Nuevo Laredo, CILA, CODEFRONT, y la Ciudad de Laredo		EPA, COCEF, PROFEPA, y Protección Civil	Steve Landin, Departamento de Bomberos de Laredo, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa, Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com 01152867 712-46-35	Establecer nuevas reuniones con el personal de las dos ciudades con el fin de revisar el lenguaje del proyecto de revisión y posiblemente desarrollar un lenguaje alternativo e incluir a Colombia en el plan.	El Presidente municipal Carlos Canturosas Villarreal y el mayor de Laredo, Texas Pete Sáenz, realizaron un convenio de colaboración para implementar el Plan de Contingencia Transfronterizo. Tienen como intención fortalecer la cooperación entre estas dos ciudades hermanas, con el fin de responder de manera eficiente en caso de alguna contingencia que ponga en riesgo la integridad física de los habitantes de ambos Laredos. Este plan de contingencia transfronterizo es un acuerdo de buena voluntad entre ambas ciudades fronterizas, en el están descritos todos los protocolos en donde se exponen diferentes situaciones, que tiene que ver con los desastres naturales, con los desbordamientos que

							pudiera tener en un futuro el río Bravo, con los tornados, los huracanes, con las epidemias que pudieran suscitarse también en materia de salud, algún derrame de materiales peligrosos sobre el río o los puentes entre otras situaciones de riesgo. También contempla el entrenamiento y ejercicio para evitar que lo anterior pueda suceder, para lo cual estarán constantemente intercambiando información sobre la situación en cada una de las ciudades. El documento se firmó el pasado 13 de julio de 2016.

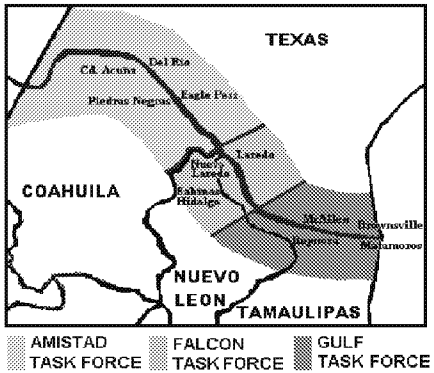
Promover Esfuerzos Transversales Relacionados con la Salud y Educación Ambiental

Proyecto N°	Descripción del Proyecto	Organismos Colaboradores	Costo Estimado	Fuente(s) de Financiamiento	Contacto(s)	Objetivo para 2015-2016	Avance del Proyecto
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Bosque Urbano Piedras Negras**	SEMA, Municipio de Piedras Negras, SEMARNAT	15 Millones Pesos	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Construir un Bosque Urbano en la ciudad de Piedras Negras con superficie de 15 ha.	Se cuenta con un avance del 98% de la obra. Proyecto en Progreso
6.0.02	**Fortalecimiento de la Red de los Centros de Educación y Vigilancia Climática Global ¨Casa de la Tierra¨**	SEDUMA, Gobierno Municipal de Reynosa.	66 Millones Pesos	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Construir, equipar y operar 3 Casas de la Tierra para atender la población de	CDT Victoria operando desde diciembre de 2013. CDT Reynosa operando desde enero de 2015.

						Norte, Centro y Sur del Estado. 160 mil visitantes anualmente.	CDT Cd. Madero operando desde el 29 de agosto de 2016.
6.0.03	**Ampliación del Programa de Sistemas de Gestión Ambiental** Ampliar el programa Estatal de Tamaulipas en la promoción de sistemas de gestión ambiental (SIMA) a más escuelas y oficinas de gobierno.	SEDUMA Tamaulipas	682,505 Pesos	SEDUMA, Empresas Participantes	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Implementar y operar sistemas de manejo ambiental (SIMA) en escuelas y oficinas públicas en los principales municipios.	Resultados (2011-2016) Con el SIMA (2011-2016) se ha logrado el reciclaje de más de 458 toneladas de residuos (principalmente archivo muerto), evitando la tala de más de 7mil 786 árboles, un ahorro de 12.4 millones de litros de agua y más de 1 mil 150 m^3 de relleno sanitario no utilizados.
6.0.04	**Modelo de Información para la Planificación de la Salud y Medio Ambiente a lo largo de la frontera Texas-MX** El desarrollo de un marco conceptual para un banco de información ambiental y de salud binacional.	El Colegio de la Frontera del Norte	$39,875	Frontera 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identificar las herramientas y capacidades necesarias, comparar los sistemas existentes, identificar y recomendar las necesidades de formación y de aprendizaje, y desarrollar un sistema de indicadores para medir la salud ambiental.	Se ha trabajado en un marco teórico para la identificación de información en salud y medio ambiente. Se han entrevistado a los diferentes actores claves. Se ha obtenido información sobre indicadores de salud y medio ambiente a través de la elaboración de Memorándums de Entendimiento entre las instituciones académicas involucradas en el proyecto y las respectivas Secretarías de Salud y Medio Ambiente del Estado de Coahuila. **Proyecto concluido**
6.0.07	**Reforma Legislativa y Educación Ambiental** Mejorar la implementación de reformas ambientales legislativas intercambiando información sobre reglamentos de cumplimiento de la ley y educación ambiental que mejoren la calidad del aire, cumplimiento ambiental y manejo de residuos sólidos en Laredo y Nuevo Laredo	Universidad Autónoma de Tamaulipas, Facultad de Comercio, Administración y Ciencias Sociales de Nuevo Laredo	$11,000	Frontera 2020	Dr. Juan Herrera Izaguirre, Universidad Autónoma de Tamaulipas, 0115286719-42-50 jaherrera@uat.edu.mx	Actualizar reglamentos ambientales de Nuevo Laredo de acuerdo con reglamentos estatales y federales, desarrollar una base de datos	Una de las metas que se busca en este proyecto, es la capacitación en escuelas de la localidad de Nuevo Laredo, Tamaulipas, primordialmente en jóvenes estudiantes. De acuerdo a los resultados, se capacitaron a 115 estudiantes de nivel primaria y 157 de licenciatura los temas prioritarios y que

						sobre reglamentos ambientales en municipios fronterizos en Tamaulipas, capacitar a 15 inspectores municipales y personal de ecología sobre reglamentos municipales ambientales, y difundir el manejo sustentable de residuos y conservación del agua en las escuelas.	pueden representar una problemática son: El cuidado del agua y el reciclaje. También se capacitó a 272 estudiantes y a 20 inspectores y funcionarios Municipales. El objetivo principal de las actividades programadas es desarrollar aún más los conocimientos a los estudiantes e inspectores de la localidad sobre cultura del agua, reciclaje y manejo de grasas. Se realizó la capacitación para personal de la dirección de Medio Ambiente y Cambio Climático de la localidad respecto al conocimiento de la legislación ambiental, cuidado del agua y reciclaje. En los foros realizados se expusieron los temas de identificación de leyes federales, estatales y municipales a través del uso de las tecnologías, de igual manera se les explico cómo identificar la jurisdicción de temas de interés como son las Áreas Naturales Protegidas, la contaminación en estos tres niveles competenciales. De igual manera se les dio una conferencia sobre la importancia de los cargos que los inspectores realizan y se les hablo sobre el acto administrativo y su relación con la materia ambiental. La participación de los funcionarios fue muy buena al contar con 20 inspectores y funcionarios de la dirección de Medio Ambiente y cambio climático. Proyecto en Progreso

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup
September 2015



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical extension and the number of municipalities. The region includes parts of three states and a total of at least 29 municipalities on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2015, the three task forces held meetings to discuss initial priorities for the 2015-2016 Action Plan. Several conference calls with leaders were held in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side
    c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal:

4. Assist communities to build capacity for waste streams: by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets

ED_002319B_00013836-00001

5. Expand environmental education related to waste issues

6. Enhance Joint Preparedness for Environmental Response
    a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills in the.
    b. Coordinate emergency preparedness response table top exercise or field exercises.

7. Develop a certified environmental health curriculum to train border community health workers and promotoras on lead, mercury, pesticides, and other heavy metals

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitoring of drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalizing the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets(such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop a diagnostic study on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs.
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias
5. Healthy Homes training for promotoras along the GTF' US-MX border

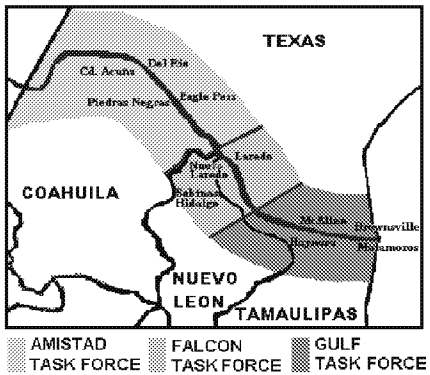
ED_002319B_00013836-00002

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures.							
1.1.01	**Characterization of Drayage Activities & Emissions Laredo-Nuevo Laredo Airshed** Develop a detailed characterization of the drayage activity in the Laredo-Nuevo Laredo region and its air quality implications.	Texas A&M Transportation Institute	$89,750 US Dollar	Border 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Gather activity information on drayage vehicles to estimate their emissions impacts in the Laredo and Nuevo Laredo airshed.	TTI obtained permissions by the EPA, BECC and the Texas A&M IRB to collect GPS data from drayage vehicles operating in the Laredo-Nuevo Laredo region. TTI recruited 20 drayage truck operators and collected GPS data. TTI staff are analyzing the data and determining the emission impact of the trucks.

ED_002319B_00013836-00003

1.1.02	**Emissions from Long Haul MX Diesel Trucks in Laredo-San Antonio Corridor** Survey diesel truck activity and evaluate typical Mexican diesel truck emissions along Laredo-San Antonio Corridor.	Texas A&M Transportation Institute	$100,000 US Dollar	EPA, TCEQ	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu (512) 467-0946	Collecting and analyzing data. TTI will present findings and report in August.	The project is complete. In August a final report was submitted to TCEQ with findings and is currently under review.
Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to quality data.							
1.3.01	**Update the Ecological Program Code for the Region Cuenca de Burgos, Tamaulipas**	SEDUMA Tamaulipas	$2 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a Monitoring and Evaluating System for the most relevant environmental Indicators, considering performance, defining measurements that allow one to track the strategy's effectiveness and the code's defined policies.	The project is in the process of being updated by a hired external consultant that will perform modifications to the current code.
Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States, and build the necessary capacity to guarantee sustained implementation.							
1.4.01	**Municipal Climate Action Plan of San Fernando, Tamaulipas**	SEDUMA, Gobierno Municipal de San Fernando, Tamaulipas	$ 2.199 Million Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Develop a public policy planning instrument for the development of strategies and actions to mitigate greenhouse gas	This project is undergoing administrative procedures to execute the awarded budget. The municipality of San Fernando will oversee the project and has State support for

						emissions. Reduce municipal vulnerability to climate change by enhancing adaptability.	the validation of reference terms and the respective technical annex.
1.4.02	**Tamaulipas State Climate Change Program**	SEDUMA Tamaulipas	$200,000 US Dollar	Banco Interamericano de Desarrollo (BID)	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Update the greenhouse gas emissions inventory and develop the program's climate change adaptation agenda.	An external consultant will develop the project. The update to the inventory has been completed. Currently both the Adaptation Agenda is being developed and the integration of both components. The deadline is November 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects.							
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila: Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000 US Dollar	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	The project is currently in the Microeconomic and Public Policy Phase for Coahuila State. Meetings have been held with the Technical Working Groups, the Advisory Group, and the Climate Change Committee.
1.5.02	**Air Quality Network in Coahuila** Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipalities of Piedras Negras, Acuña, Nava, Sabinas, Saltillo	$12 Million Pesos MX	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila.	The project has been authorized and is in the revision phase prior to bidding.

1.5.03	**Tamaulipas Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$300,000 US Dollar	BECC, BID	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired. They are working on the agenda, updating the emissions inventory, and the integration of both components.
1.5.04	**Atmospheric Monitoring System** Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA Tamaulipas	Annually: $ 250,000 Pesos MX ($150,000 Municipal & $100,000 State)	SEDUMA, City Council of Matamoros	Biol. Jorge Garcia, jgarciah@tamaulipas.gob.mx 834 1078291	By 2014, the system will operate at 100% with programmatic consistency standards.	Currently four of the eight municipalities have their air monitoring network in operation (01 Nuevo Laredo, 02 in Victoria, 01 in Madero and 01 Tampico). The operation site for the four monitors located in Matamoros for the last trimester of 2015 is being managed.
1.5.05	**Green Infrastructure Workshop**	SEMA, COCEF		SEMA, COCEF	Tomás Balarezo, COCEF, tbalarezo@cocef.org	Train municipalities on Green infrastructure.	Two workshops were held. One on April 21, 2015 in which 5 municipalities from the Southeast region attended and a second workshop on May 27, 2015 that was attended by 10 municipalities from the Central and Desert regions. The state workshop will occur in the final trimester of 2015.

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	**Upgrade Sewer Line Infrastructure Nuevo Laredo** Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5 Million US Dollar	NADB	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Complete the project by January 2015.	The BECC certified the project in September of 2012. Of the five sewer lines one was completed during the first half of 2014. The remaining four lines are under repair and discharge approximately 1.6 MGD to the fluvial water system. Another discharge point was identified by COMAPA in the Arroyo La Joya and will be repaired.
2.2.02	**Management of Fats, Oils, and Grease Nuevo Laredo** Reduce the concentration of fats, oils, and grease in the effluent water coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo León.	$32,533 US Dollar	Border 2020	Ing. Juan Carlos Pérez, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Hold workshops and follow-up with commercial establishments on implementation of FOG programs	COMAPA organized workshops with the support of students from the Technical University to educate commercial establishments and residents on best practices. The last workshop was held in August of 2015 that included a tour of the International Waste Water Treatment Plant. All the establishments that participated in the workshops have grease traps and are applying control and operating techniques. COMAPA is drafting the final project report.

2.2.03	**Ideal Biological Filtration Material South Texas Storm Management** Identify the best locally available material for use in bio-swale in the Lower Rio Grande Valley & South TX.	University of Texas Pan American	$26,022 US Dollar	Border 2020	Jungseok Ho, Ph.D. University of Texas Rio Grande Valley, jungseok.ho@utrgv.edu (956) 665-3104	The proto-type bioswale will be tested in a newly constructed parking lot on the campus of UT Pan American.	The recycled ground recycled glass of medium porosity demonstrated good hydrologic performance in the biological filtration process.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	**Removal of Invasive Plants** Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, PROFAUNA, WWF, Slim Foundation	$1.5 Million Pesos MX Annually	SEMA (Coahuila), CONANP, Profauna WWF, Slim Foundation	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Plant Control: 2014: Tamarix 34 ha & Carrizo 40 ha; 2015 Tamarix 34 ha and Carrizo 40 ha; 2016: Tamarix 34 ha and Carrizo 40 ha.	Since 2014 PROFAUNA and CONANP with the support of WWF and the Slim Foundation have annually protected 34 hectares from the Tamix plant and 40 hectares from Carrizo. To date they have continue to protect the same quantity of land and it is anticipated that they will maintain this amount in 2016.
2.3.02	**Conservation of Las Vacas Stream** Design and implement actions to improve water quality and promote an adequate habitat for flora and fauna species in the Arroyo Las Vacas.	Ciudad Acuna Department of Environment, SEMA Coahuila	$44,200 US Dollar	Border 2020	Lic. Alejandra Carrera, Secretaria de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implement actions to improve water quality and promote an adequate habitat for flora and fauna species in Las Vacas stream.	Progress has been made regarding the Arroyo Las Vacas diagnostic, water quality monitoring, and identification and detection of disputes through a ITSA-UT Austin Knowledge Exchange. A presentation of the project was presented at the Environmental Trade Fair in May 2015. In November, a training is scheduled regarding bi-national water quality, data comparison, and water sampling.

2.3.03	**Lower Rio Grande Binational Water Quality Initiative (LRGWQI)** Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan ,TCEQ, 512-239-2369, Kelly.holligan@tceq.texas.gov	Implement actions to improve water quality and promote an adequate habitat for flora and fauna in the Arroyo Las Vacas.	In March the LRGWQI's Binational Technical Work Group conducted the first of four binational synoptic water quality surveys scheduled for the project. They also developed a preliminary input file for a steady-state water quality model of the Rio Grande/Río Bravo (Falcon Dam to Gulf of Mexico).

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**Environmental Education Program Nuevo Laredo** Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America Beautiful.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipality of Nuevo Laredo		City of Laredo Environmental Services local partners, and Keep America Beautiful	Lynne Nava, Keep Laredo Beautiful, lnava1@ci.laredo.tx.us 956-794-1650	Establish an environmental organization affiliated with Keep America Beautiful by 2016.	Keep Laredo Beautiful will be meeting with officials of the Technological University of Nuevo Laredo in August to discuss the project and inquire about their interest in establishing an environmental organization through Keep America Beautiful. Keep Laredo Beautiful has committed to pay membership fees for one year for the organization to be affiliated with Keep America Beautiful.
3.1.02		SDS Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000 US Dollar	Border 2020, BECC	Norma Rangel Sevilla, SDS, Nuevo León,	Analyze the generation of solid and "special	Project completed. The study was finalized in June 2015. More

	Characterization Municipal Solid Waste Stream & Diagnosis Regarding Generation/Management of Waste Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo León.				normaarangel@gmail.com 0115281 20 33-19-38	management" of six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	details of the study will be provided at a later date.
3.1.03	**Operation of an Electronic and Household Hazardous Waste Stockpile Center**	Municipality of Nuevo Laredo, Tamaulipas	$3.626 Million Pesos MX	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretario de Obras Públicas, Desarrollo Urbano y Medio Ambiente, cdeandah@hotmail.com	Develop a municipal infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	The installations are finished. Only authorization from SEMARNAT is needed for operation, which is underway. It is possible for operations to commence in the last trimester of the year.
3.1.04	**Environmental Code for the Disposal of Construction Waste**	Municipality of Nuevo Laredo, Tamaulipas	The project is funded through money paid by residents for the management and processing of waste.	Municipality of Nuevo Laredo, Tamaulipas	Arq. Carlos de Anda Secretariat of Public Works, Urban Development & the Environment, cdeandah@hotmail.com	Generate an alternative for the community for the disposal of construction waste and mitigate clandestine dumping.	This project has operated continually and generated an important impact to the community. 123 pesos per cubic meter are paid when the waste is no greater than 2 cubic meters. If it is three to ten cubic meters the service cost 88 pesos. If it exceeds 10 cubic meters, in order to leave the program, 100 pesos are charged per cubic meter.
3.1.05	**Clean-up Campaign Keep Pharr Beautiful** Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.	Public Works Department, City of Pharr	$20,000 US Dollar	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Reduce illegal dumping in residential and industrial sectors and encourage residents to take	The project has ended and the majority of their objectives were attained. Various public awareness events monthly clean-ups were organized. A workshop was organized for the

						responsibility for the beatification of their communities.	community about the reduction of clandestine dumping. The City plans to continue clean-up campaigns and environmental education activities.
3.1.06	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838 US Dollar	Border 2020	Melissa Gonzales, City of Alamo	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Various presentations were organized in 12 different locations in different schools that reached 700 students. Bilingual signs about not littering were posted.
3.1.07	**Clean-up of Urban Solid Waste Disposal Site in Guerrero Tamaulipas**	SEDUMA, Municipio de Guerrero, Tamaulipas	$3.169 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Legalize and encourage compliance to NOM-083-SEMARNAT-2003, referring to the closing of disposal sites.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.
3.1.08	**Construction and Equipping of the First Phase of Type A Landfill in Río Bravo, Tamaulipas**	SEDUMA, Municipio de Río Bravo, Tamaulipas	$19.359 Millones Pesos MX	SEMARNAT PEF 2015	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Have adequate modern infrastructure for the final disposal of urban solid waste.	Project was certified by SEMARNAT and the documentation regarding adjudication of resources is in progress.

3.1.09	**Construction and Equipping of Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz y Sabinas	$25 Millones Pesos MX	SEMARNAT PEF 2015	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Conduct land studies. Under analysis before request for bids.
3.1.10	**Construction and Equipping of Inter-municipal Landfill in the Municipalities of Juarez and Progreso, Coahuila**	SEMA, Municipality of Juárez y Progreso	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.11	**Construction and Equipping of Urban Solid Waste Residual Stations in the Municipality of Múzquiz, Coahuila**	SEMA, Municipio de Múzquiz	$8 Millones Pesos MX	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, Oscar.flores@sema.gob.mx	Construction and operation.	Under analysis before request for bids.
3.1.12	**RECOLECTRÓN Program** Recollection program for electronic waste within the municipalities.	SEMA, Municipalities Acuña, Allende, Nava y Sabinas	$2 Million Pesos MX	SEMA	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx	In 2015 collect 44.91 tons of waste. In 2016 collect 56.14 tons of waste.	To date 44.89 tons of waste has been collected.
3.1.13	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Utilizing three cuts volume and the accumulation of water which are breeding grounds for mosquitos (vectors for dengue fever) are reduced.	Municipality of Acuña, Coahuila	$12,000 US Dollar	Municipio de Acuña Coahuila	Biol. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx	Develop a municipal infrastructure for stockpiling, managing, and disposing of scrap tires.	There is a regulatory framework that regulates management and a program underway for stockpiling, but an infrastructure is required for final disposal.
3.1.14		Municipality of Acuña, Coahuila	$12,500 US Dollar	Municipality of	Biol. Carlos Alejandro Flores Diego, Director de Ecología,	Develop a municipal	The regulatory framework was approved as well as an alteration

	Disposal of Electronic and Hazardous Waste Create a stockpile center for the special management of waste, in which			Acuña Coahuila.	floresdiegocarlos@yahoo.com.mx	infrastructure for stockpiling, managing, and disposing of electronic and hazardous waste.	to municipal regulations regarding the environment to approve an operating license for 6 months and certification of training workshops. Partnership with CECART#197 for certification.
3.1.15	**Scrap-Tire Management Program** Design and implement a state scrap-tire management program that includes valuation.	SEDUMA Tamaulipas	$ 400 Million Pesos MX	SEDUMA, SEMARNA, EPA	Biol. Jorge García, jgarciah@tamaulipas.gob.mx 834 1078291	Work with cities located on the northern border of the State to regulate a temporary stockpile system for used tires.	The State authorized the business, ECONEU of Reynosa, to operate the Recycle Plant and Scrap Tire Processor, of which they anticipate to break down 100,000 scrap tires annually.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	**Update Cross-Border Contingency Plan** Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.	Laredo Fire Department, Civil Protection of Nuevo Laredo, and CILA, CODEFRONT, and the City of Laredo		EPA, COCEF, PROFEPA, and Protección Civil	Steve Landin, Laredo Fire Department, slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa, Protección Civil Nuevo Laredo, Juan.u8a@hotmail.com 01152867 712-46-35	Hold new meetings of the staff of the two cities in order to revisit the language of the draft revision and possibly develop alternative language and include Colombia in the plan.	The project is on hold because city council has not approved changes to language of the draft revision, intending to clarify that Laredo could not send personnel to respond to incidents across the border, but could assist in other ways.

4.2.02	**Hazardous Materials First Responders Binational Training in McAllen-Mission-Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Fire department	$75,000 US Dollar	Border 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540	Hold a System and Incident Command Training with firemen from McAllen, Mission, Pharr, and Reynosa.	The Fire Department in McAllen will coordinate and hold the workshop at the end of August.

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

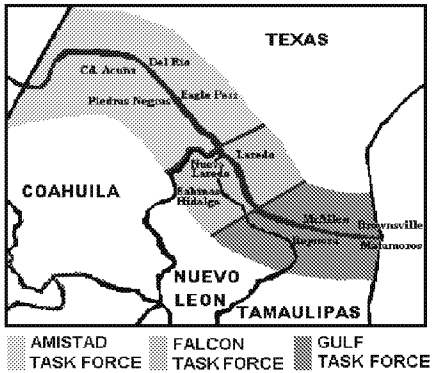
Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	2015-2016 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Urban Forest Piedras Negras**	SEMA, Municipio de Piedras Negras, SEMARNAT	$ 15 Million Pesos MX	SEMARNAT	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	Construct an urban forest in the city of Piedras Negras the size of 15 hectares.	Ninety-four percent of the project is complete.
6.0.02	**Strengthening School Networks and Global Climate Change Surveillance "Casa de Tierra"**	SEDUMA, Gobierno Municipal de Reynosa.	$ 66 Million Pesos MX	Gobierno del Estado de Tamaulipas, SEMARNAT	Dra. Silvia Casas González, SEDUMA, silvia.casas757@gmail.com	Build, equip, and operate 3 "Casa de Tierra" to attend to the population in the northern, central, and southern areas of the State. 160 visitors annually.	CDT Victoria operating since December of 2013. CDT Reynosa operating since January 2015. CDT Madero in the final phase of construction.
6.0.03	**Extension of Environmental Management Systems Program** Extend Tamaulipas' state program in promoting environmental management	SEDUMA Tamaulipas	$ 300,000 Pesos MX	SEDUMA, Empresas IP, Participants	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SIMA enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a

	systems (SIMA) to more schools and government offices.						total of 26,000 students. Schools received equipment. SIMA trained 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs.
6.0.04	**Planning of Health & Environmental Information Model Along TX-MX Border** The development of a conceptual framework for a bi-national environmental and health information repository.	El Colegio de la Frontera del Norte	$39,875 US Dollar	Border 2020	Dr. Felipe Uribe, COLEF, ursafeja@gmail.com 878 782 7207	Identify required tools and capacities, compare existing systems, identify and recommend training or educational needs, and develop an indicator system to measure environmental health.	A theoretical framework in order to identify information on health and the environment was developed. Different key contacts were interviewed. Information was obtained about health and environmental indicators through the elaboration of Memorandums of Understanding between academic institutions involved in the project and the respective Secretariats of Health and the Environment from Coahuila State.
6.0.05	**Promotora-Led Environmental Health Education for Children** 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 heath promotoras, who subsequently will provide educational information in elementary schools, child care settings and to colonia residents.	La Amistad AHEC and Southwest Border AHEC	$69,083 US Dollar	Border 2020	Rosa Elvira Martinez, Southwest Area Border Health Education Center, rose.martinez@swbahec.org (830) 758-1111	Conduct training and provide educational information on pesticide awareness to elementary schools and homes in colonias.	As of July, promotoras had conducted visits to two elementary schools and one head start to educate children on hazards related to pesticide exposure and household chemicals. Promotoras also conducted training on pesticide awareness in more than 30 homes and post-assessments in seven homes, with 23 of them expected to be evaluated in the fall of 2015.

ED_002319B_00013836-00015

BORDER 2020
2015-2016 Action Plan
TX-COAH-TAMP-NL Regional Workgroup

August 2015



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2015 the three task forces have held meetings to discuss initial priorities for the 2015-2016 Action Plan, and several conference calls of leaders were held in June 2015 to develop a consensus of priorities at the task force and regional workgroup levels.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2015-2016 version is the second of its kind. Several projects have been carried over from the 2013-2014 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

Regional Priorities

1. Improve air quality through the following approaches:
    a. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
    b. Analyze emissions and emission sources in specific air sheds
    c. A study on the possible health effects caused by climate change

2. Improve water quality by taking the following actions:
    a. Evaluate the Rio Grande watershed in the region
    b. Establish enforcement programs to prevent pollution on water bodies on the Mexican side

ED_002319B_00013852-00001

c. Improve water infrastructure as it pertains to treatment systems and distribution in rural areas

3. Address problems of improper waste disposal:
4. Assist communities to build capacity for waste streams: by implementing recycling, household hazardous waste and electronic waste collection and disposal programs and develop comprehensive plans for scrap tire disposal and alternative markets
5. Expand environmental education related to waste issues
6. Enhance Joint Preparedness for Environmental Response
   a. Provide HAZMAT training to local first responders to reduce exposure to chemicals as a result of accidental chemical releases and/or spills in the.
   b. Coordinate emergency preparedness response table top exercise or field exercises.
7. **Develop a certified environmental health curriculum to train border community health workers and promotoras on lead, mercury, pesticides, and other heavy metals**

Individual Task Force Priorities

Amistad Task Force

1. Generate plans to mitigate the impacts of climate change in Coahuila
2. Establish air quality monitoring stations and exchange data with Texas
3. Develop a database to measure emissions of hydraulic fracturing operations in Coahuila
4. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
5. Develop water conservation and reuse programs for irrigation in Coahuila
6. Establish waste management programs in ten municipalities in Coahuila (including used electronics, household hazardous waste management and recycling)
7. Develop and promote scrap tire, recycling and solid waste management programs on the Kickapoo Reservation

ED_002319B_00013852-00002

Falcon Task Force

1. Conduct a study on the use of methane gas for energy generation in landfills
2. Monitoring of drilling operations in the Eagle Ford Shale and on the Mexican side
3. Finalizing the cross-border contingency plan
4. Generate studies and projects for water reuse and conservation
5. Develop adequate management, alternative markets(such as tire cutters) and ordinances for scrap tires
6. Establish used electronics and household hazardous waste programs in municipalities in the Falcon Task Force
7. Develop a diagnostic study on the generation and alternative markets for construction waste in the Falcon Task Force
8. Develop a workshop on best practices related to public health and environmental education indicators

Gulf Task Force

1. Outreach programs to improve energy efficiency.
2. Educate the community on how to improve water quality
3. Improve or develop Industrial Pretreatment, Fats, Oil & Grease Management and Storm Water Programs.
4. Increase environmental awareness and responsibility with regard to solid waste and water related health effects in city residents, rural communities and colonias.
5. Healthy Homes training for Promotoras along the GTF' US-MX border

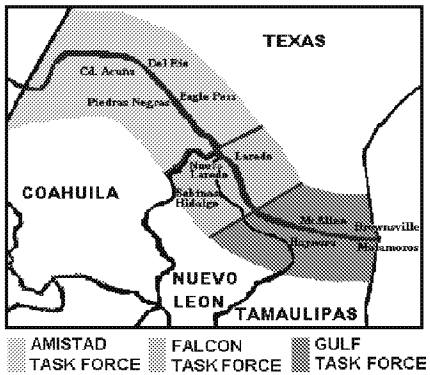
ED_002319B_00013852-00003

Border 2020

2015-2016 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Points of Contact	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures.							
1.1.01	**Coahuila Vehicle Inspection Program** To develop Coahuila's vehicle inspection program, partly in consultation with the State of Texas regarding their experience.	SEMA, Coahuila, COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ	$700,000	Municipios	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, and Monclova.	Implementation is in progress. The current administration reports that no state funding is available and all jurisdictions are at the municipal level. Acuña obtained equipment in late 2014. Officials in Nava are identifying funding sources for the purchase of equipment.

1.1.02*	**Characterization of Dryage Activities & Emissions Laredo-Nuevo Laredo Airshed** Develop a detailed characterization of the drayage activity (short-haul, cross-border transport of state) in the Laredo-Nuevo Laredo region and its air quality implications.	Texas A&M Transportation Institute	$89,750	Border 2020	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu, (512) 467-0946	Gather activity information on drayage vehicles to estimate their emissions impacts in the Laredo and Nuevo Laredo airshed	TTI obtained permissions by the EPA, BECC and the Texas A&M IRB to collect GPS data from drayage vehicles operating in the Laredo-Nuevo Laredo region. TTI recruited 20 drayage truck operators and collected GPS data.TTI staff are analyzing the data and determining the emission impact of the trucks.
1.1.03	**Emissions from Long Haul MX Diesel Trucks in Laredo-San Antonio Corridor** Survey diesel truck activity and evaluate typical Mexican diesel truck emissions along Laredo-San Antonio Corridor.	Texas A&M Transportation Institute	$100,000	EPA, TCEQ	Dr. Reza Farzaneh, TTI, Reza.Farzaneh@tamu.edu, (512) 467-0946	Collecting and analyzing data. TTI will present findings and report in August.	In July 2015 the investigative team presented TCEQ with a progress report and will turn in all final deliverables in August.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects.							
1.5.01	**Coahulia Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila: Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	A Comité Intersecretarial ante el Cambio Climático (CICC) was established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired, and a local coordinator and local experts recruited.
1.5.02	**Tamaulipas Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$100,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	Five technical groups began work in July 2012. In 2013-14, the state strategy was redesigned. A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired.
1.5.03	**Wind Power in Nuevo León** Research the potential for harnessing	SDS (Secretaría de Desarrollo	$10,000	Mexican federal	Norma Rangel , SDS Nuevo León,	Establish wind monitors in	The Secretariat of Sustainable Development in Nuevo León has

	wind power for electricity generation in Nuevo León.	Sustentable de Nuevo León)		funds, CONACYT	normaarangel@gmail.com 0115281 20 33-19-38	selected areas of the state by 2016.	applied for different grants to obtain funding for the monitors, but has not secured funds. They will submit another grant proposal in 2015.
1.5.04	**Air Quality Network in Coahuila** Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	$1,400,000	SEMA Coahuila	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila.	Implementation has begun but the schedule for completion has been extended by two or more years. In 2013 SEMA began working with local officials to include these projects in the plans of the applicable "Metropolitan Zones". A network will be deployed in Saltillo in 2015 and in Piedras Negras in 2016.
1.5.05	**Retrofits Public Buildings in Coahuila** Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA Coahuila, Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Alejandra Carrera, SEMA/Coahuila, alejandra.carrera@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot retrofit technologies.	With assistance from the BECC, workshops were held in December 2013 in Piedras Negras and Acuña, disseminating information on how public buildings could be made more energy-efficient. No information is available regarding whether 10 pilot projects are being pursued.
1.5.06	**Vehicle Emissions Inspection Program** Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA Tamaulipas		SEDUMA, SEMARNAT	Ing. Humberto Rene Salinas, SEDUMA, seduma@tamaulipas.gob.mx	Have a vehicle verification program in the border area of the state by end of 2014.	A pilot program focused on the state-owned fleet was initiated in early 2013. Additional implementation was put on hold, with the hope that a program for private vehicles can be initiated in 2015.
1.5.07	**Atmospheric Monitoring System** Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA Tamaulipas		SEDUMA, EPA, and BECC	Ing. Humberto Rene Salinas , SEDUMA, seduma@tamaulipas.gob.mx	By 2014, the system will operate at 100% with programmatic consistency	Eight municipalities have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Nuevo Laredo, Victoria, Mante, Tampico, Madero, and Altamira). Currently only three of these

						standards.	have their network in operation (Nuevo Laredo, Victoria, and Tampico).

Goal # 2: Improve Access to Clean and Safe Water

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2015-2016 Target	Progress Towards Target
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	**Upgrade Sewer Line Infrastructure Nuevo Laredo** Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank (NADB)	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Complete the project by January 2015.	BECC certified the project in September 2012. Of the five sewer lines, one was completed by mid-2014. The remaining four collectors were under repair and discharging about 1.6 MGD to the stormwater system. Another discharge point from La Joya Creek was identified by COMAPA and will be repaired .
2.2.02*	**Ideal Biological Filtration Material South Texas Storm Management** Identify the best locally available material for use in bio-swale in the Lower Rio Grande Valley & South TX.	University of Texas Pan American	$26,022	Border 2020		The proto-type bioswale will be tested in a newly constructed parking lot on the campus of UT Pan American.	Maria Sisneros will provide information.
2.2.03*	**Management of Fats, Oils, and Grease Nuevo Laredo** Reduce the concentration of fats, oils, and grease in the effluent water coming from restaurants and hotels and industrial dining facilities in Nuevo Laredo.	Comisión Municipal de Agua Potable y Alcantarillado, Nuevo León.	$32,533	Border 2020	Ing. Juan Carlos Pérez Faz, COMAPA Nuevo Laredo, jcarlos_faz@hotmail.com 01152867 717-24-44	Hold workshops and follow-up with comercial establishments on implementation of FOG programs	COMAPA organized workshops to educate commercial establishments and residents on best practices. First workshop was held in March, in which approx. 160 participants learned about FOG regulations and proper disposal. Two workshops were

							held in April to discuss lessons learned and follow up on FOG programs implemented by establishments at their facilities, with approx. 200 establishments. T wo additional workshops held in June and August.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	**Water-body Ecosystems in Coahuila** Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas, which are tributaries to the Rio Grande.	SEMA Coahuila, Municipio de Piedras Negras and Municipio de Acuña	$400,000	State of Coahuila and Border 2020	Alejandra Carrera, SEMA/Coahuila, alejandra.carrera@sema.gob.mx	Implement campaigns and conclude land conservation agreements by the end of 2014.	SEMA obtained EPA funding through the BECC in spring 2014 to restore and conserve the Arroyo Las Vacas. SEMA developed partnerships with TCEQ, Cd. Acuña, academic institutions, and UT Austin. SEMA and BECC finalized the workplan and are negotiating the quality assurance project plan. In October 2014 in Cd. Acuña SEMA held a ribbon cutting for the Arroyo Las Vacas project and a complementary signing ceremony regarding land conservation.
2.3.02	**Removal of Invasive Plants** Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, Profauna	$85,000	SEMA (Coahuila), CONANP, Profauna –	Alejandra Carrera, SEMA Coahuila, alejandra.carrera@sema.gob.mx	By the end of 2014, increase activities of the invasive species plant removal program.	No progress yet had been made by mid-2013. No information has been available since then.
2.3.03	**Lower Rio Grande Binational Water Quality Initiative** Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan ,TCEQ, 512-239-2369, Kelly.holligan@tceq.texas.gov	Implement actions to improve water quality and promote an adequate habitat for flora and fauna species in Las Vacas stream.	In March the LRGWQI's Binational Technical Work Group conducted the first of four binational synoptic water quality surveys scheduled for the project. They also developed a preliminary input file for a steady-state water quality model of the Rio Grande/Río Bravo (Falcon Dam to Gulf of Mexico).

2.3.04*	**Conservation of Las Vacas Stream** Design and implement actions to improve water quality and promote an adequate habitat for flora and fauna species in the Arroyo Las Vacas.	Ciudad Acuna Department of Environment, SEMA Coahuila	$44,200	Border 2020	Lic. Alejandra Carrera, Secretaria de Medio Ambiente de Coahuila, alejandra.carrera@sema.gob.mx 01152844 410-0014	Implement actions to improve water quality and promote an adequate habitat for flora and fauna species in Las Vacas stream.	SEMAC conducted a diagnostic study of the environmental conditions and issues. SEMAC collaborated with the Acuña ecology department and the Instituto Tecnológico Superior de Acuña (ITSA), to gather water quality data and identify sources of pollution, and conduct cleanup activities. TCEQ and the LBJ School at UT Austin organized a technical exchange with ITSA students and SEMAC officials in May. In September, a training is scheduled on binational water quality monitoring, data calibration, sampling techniques, , etc.

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2015-2016 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	**SEMARNAT's Green Schools Program** Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila		SEMARNAT	Delfino Ramirez, SEMARNAT, Delfino.ramirez@semarnat.tamaulipas.gob.mx Lic. Alejandro Manriquez Ramirez, SEMARNAT, educacion@coahuila.semarnat.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013. Hold an information exchange meeting w/Texas 2014.	SEMARNAT implemented the program very successfully in Tamaulipas and on a very limited basis in Coahuila. By mid-2013 in Tamaulipas, 135 schools had been registered in the program—33 in Nuevo Laredo, 50 in Reynosa, and nine in Matamoros.
3.1.02	**Environmental Education Program Nuevo Laredo** Establish an environmental	Keep Laredo Beautiful, Keep America		The City of Laredo Environment	Lynne Nava, Keep Laredo Beautiful,	Establish an environmental organization	Keep Laredo Beautiful will be meeting with officials of the Technological University of

	organization to develop environmental awareness and clean-up programs in Nuevo Laredo in affiliation with Keep America Beautiful.	Beautiful, and the Municipio of Nuevo Laredo		al Services local partners, and Keep America Beautiful	lnava1@ci.laredo.tx.us 956-794-1650	affiliated with Keep America Beautiful by 2016.	Nuevo Laredo in August to discuss the project and inquire about their interest in establishing an environmental organization through Keep America Beautiful. Keep Laredo Beautiful has committed to pay membership fees for one year for the organization to be affiliated with Keep America Beautiful.
3.1.03*	**Clean-up Campaign Keep Pharr Beautiful** Support monthly cleanup program Keep Pharr Beautiful with strong public outreach.	Public Works Department, City of Pharr	$20,000	Border 2020	Grace Gonzalez, Pharr Public Works Department, grace.gonzales@pharr-tx.gov	Reduce illegal dumping in residential and industrial sectors and encourage residents to take responsibility for the beatification of their communities.	Maria Sisneros will provide information
3.1.04*	**Alamo's Recycling TEAM Includes Everyone** Implement the Alamo's Recycling TEAM Includes Everyone (ARTIE) Project, which strives to enhance the management of solid waste in the city.	City of Alamo	$54,838	Border 2020	Melissa Gonzales, City of Alamo,	Increase recycling efforts by at least 25%, increase awareness of non-point pollution and solutions and establish partnerships that will promote environmental stewardship.	Maria Sisneros will provide information
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
3.2.01	**Local Use Compost in Nuevo Laredo** Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard	COMAPA and Municipio de Nuevo Laredo		Municipio de Nuevo Laredo	Delfino González C.P., COMAPA, dgcdelfino@comapanuevolaredo.gob.mx	Sign contract with the municipio to purchase gear for compost	

	wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).				,	generation, and sell to commercial establishments.	
3.2.02	**Scrap-Tire Management Program** Design and implement a state scrap-tire management program that includes valuation.	SEDUMA Tamaulipas	$ 400,000	SEDUMA, SEMARNA, EPA	Ing. Humberto Rene Salinas , SEDUMA, seduma@tamaulipas.gob.mx	Develop public policy and a management plan for scrap tires.	The project is on hold.
3.2.03	**Energy Value of Waste Tamaulipas** SEDUMA will evaluate the ways in which energy could be recovered from waste and used.	SEDUMA	$300,000	EPA	Ing. Humberto Rene Salina, SEDUMA, seduma@tamaulipas.gov.mx	Action Plan to be complete by the end of 2014.	The project is on hold.
3.2.04	**Characterization Municipal Solid Waste Stream & Diagnosis Regarding Generation/Management of Waste** Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León. Analyze the generation of solid and "special management" of waste in six border municipalities in Nuevo Leon and recommend waste management approaches to the collection, temporary storage and final disposal of waste.	SDS Nuevo León and Municipio of Sabinas Hidalgo, Nuevo León	$47,000	Border 2020, BECC	Norma Rangel Sevilla, SDS, Nuevo León, normaarangel@gmail.com 0115281 20 33-19-38	Analyze the generation of solid and "special management" of six border municipalities and characterize the solid waste stream in Sabinas. Complete the study in 2015.	The study was finalized in June 2015. More details of the study will be provided at a later date.

Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	**Remediation Old Oxidation Lagoons** Complete the remediation of old oxidation lagoons in Piedras Negras.	Municipio de Piedras Negras and SEMACoahuila	$300,000	SEMA	Maria Teresa Molina, Municipio de Piedras Negras, teduada@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013. The municipality will create extension	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. Piedras Negras has not responded to inquiries about the project during 2013 and 2014.

						of green area.	
3.3.02	**Scrap Tire Management Plan** Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA, Coahuila, Municipio de Piedras Negras	$400,000	SEMA	Oscar Flores oscar.flores@sema.gob.mx	Develop plan and place in full operation by the end of 2014	By mid-2013, SEMA determined they needed to perform a feasibility study on using coal pits as disposal sites for scrap tires. No information has been available since then.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2015-2016 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	**Hazardous Materials First Responders Binational Training in McAllen-Mission-Pharr, TX and Reynosa, Tamaulipas**	City of McAllen Fire department	$75,000	Border 2020	Juan A Gloria Jr, Deputy Chief McAllen, jgloria@mcallen.net 956 681-2540		Maria Sisneros will provide information.
4.2.02	**Update Cross-Border Contingency Plan** Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA, CODEFRONT, and the City of Laredo	$0	EPA, COCEF, PROFEPA, and Protección Civil	Steve Landin Laredo Fire Department slandin@ci.laredo.tx.us 956-795-2150 Juan Ochoa Protección Civil Nuevo Laredo Juan.u8a@hotmail.c	Hold new meetings of the staff of the two cities in order to revisit the language of the draft revision and possibly develop alternative language and include Colombia in the plan.	The project is on hold because city council has not approved changes to language of the draft revision, intending to clarify that Laredo could not send personnel to respond to incidents across the border, but could assist in other ways.

	currently directed to this bridge.				om 01152867 712-46-35		

Goal 6: Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

Project N°	Project Title Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2015-2016 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	**Extension of Environmental Management Systems Program** Extend Tamaulipas' state program in promoting environmental management systems (SIMA) to more schools and government offices.	SEDUMA Tamaulipas	$ 300,000	EPA, SEDUMA/ SEMARNAT	Dra. Silvia Casas, SEDUMA, silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SIMA enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a total of 26,000 students. Schools received equipment i.e. low-flow water toilets, recycling containers, and energy-efficient light bulbs. SIMA trained 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs .
6.0.02*	**Planning of Health & Environmental Information Model Along TX-MX Border** The development of a conceptual framework for a bi-national environmental and health information repository. T	El Colegio de la Frontera del Norte	$39,875	Border 2020	Dr. Felipe Uribe, COCEF,	Identify required tools and capacities, compare existing systems, identify and recommend training or educational needs, and develop an	Maria Sisneros will provide information.

						indicator system to measure environmental health in the region.	
6.0.03*	**Promotora-Led Environmental Health Education for Children** 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 heath promotoras, who subsequently will provide educational information in elementary schools, child care settings and to colonia residences.	La Amistad AHEC and Southwest Border AHEC	$69,083	Border 2020	Rosa Elvira Martinez Southwest Area Border Health Education Center rose.martinez@swbahec.org (830)758-1111	Conduct training and provide educational information on pesticide awareness to elementary schools and homes in colonias.	As of July, promotoras had conducted visits to two elementary schools and one head start to educate children on hazards related to pesticide exposure and household chemicals. Promotoras also conducted training on pesticide awareness in more than 30 homes and post-assessments in seven homes, with 23 of them expected to be evaluated in the fall of 2015.

Amistad Task Force
Priorities and Emerging issues for 2015 RFP

Goal 1: Reduce Air Pollution

- Generate a municipal pilot plan to mitigate the impact of climate change
- Establish an air quality monitoring station and exchange information with the State of Texas
- Develop an air database to measure emissions before and after hydraulic fracturing operations in Coahuila
- Promote the use of renewable energy
- Train automobile technicians on vehicle emission programs

Goal 2: Improve Access to Clean and Safe Water

- Develop rainwater harvesting and water reuse techniques (such as condensate water from AC units) for irrigation of green areas and encourage installation of drip irrigation systems
- Conduct a water sampling study in the Rio Grande downstream of the Del Rio wastewater treatment plant to determine if it meets quality standards

Goal 3: Promote Materials Management and Waste Management and Clean Sites

- Establish waste management programs in ten municipalities in Coahuila
- Develop a recycling and awareness program in the community
- Establish a used electronics and household hazardous waste management program in Acuña
- Develop a scrap tire management program on the Kickapoo reservation
- Promote recycling and solid waste disposal programs on the reservation

Goal 5: Enhance Compliance Assurance and Environmental Stewardship

- Establish a municipal enforcement program to prevent pollution on water bodies, such as Las Vacas creek and San Rodrigo river

Goal 6: Promote Cross-Cutting Efforts related to Environmental Health and Environmental Education

- Develop a water quality study for heavy metals in the Rio Grande and a diagnostic study between the correlation of cancer rates in children and drinking water
- Expand environmental awareness activities by the Green Tec Osos (an environmental group from the Piedras Negras Technological Institute) in the community such as "A Day Without Gasoline."

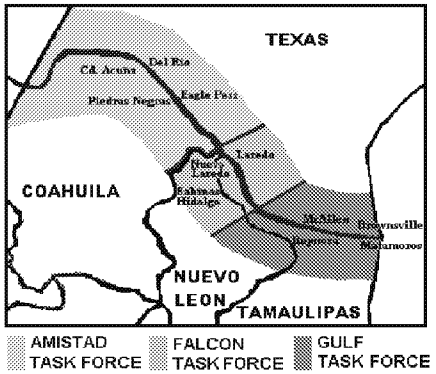
BORDER 2020

FINAL REPORT ON THE 2013-2014 Action Plan

TX-COAH-TAMP-NL Regional Workgroup, basis for the 2015-2016 Action Plan

January 2015

(original plan published in October 2012)



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
   a. Analyze emissions and emission sources in specific airsheds
   b. Engage in both road-paving and reforestation (using native species)
   c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
   d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
2. Improve water quality by taking the following actions:
   a. Evaluate the portion of the Rio Grande watershed that is in the region
   b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
   c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
   d. Develop more applications for the re-use of water
   e. Reduce non-native species in the water bodies
   f. Continue and expand environmental education efforts such as “Adopt the River” and “Day of the River”

ED_002319B_00013879-00001

3. Address problems of improper waste disposal:
    a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
    b. Expand environmental education related to waste issues
    c. Close and remediate open dumps wherever required by regulation
4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Reduction of energy consumption in buildings and street lighting
2. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
3. Construction of sanitary landfills
4. Attention to waste disposal in gas drilling operations
5. Continuing attention to emergency response
6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
7. Improvement of vehicle inspection programs in Coahuila
8. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Re-use of treated water
2. Monitoring of drilling operations in the Eagle Ford Shale
3. Finalizing the cross-border contingency plan

Gulf Task Force

1. Improvement of water-related infrastructure, and increased attention to water conservation and re-use
2. Increased recycling
3. Continuing capacity-building at the local, state, and federal levels of government
4. Technical exchanges, including best practices and lessons learned

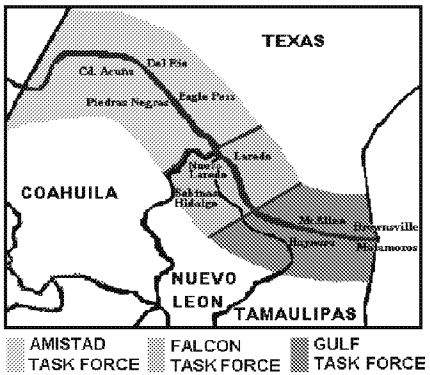
ED_002319B_00013879-00002

Border 2020

2013-2014 Action Plan Grid
Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



Note: This Border 2020 Action Plan does not include infrastructure projects related directly to Border 2020 goals and objectives in air, water, and waste that have been financed in part or in full by the binational North American Development Bank. For information on those projects, see http://www.nadbank.org/.

GOAL # 1: Reduce Air Pollution

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures							
1.1.01	Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (State of Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ (State of Texas)	$700,000	Originally SEMA (State of Coahuila); now the municipios	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, Monclova, Saltillo, and Ramos Arizpe.	Implementation is in progress. The original commitment was made by a former

							administration in Coahuila. The current administration reports that no state funding is available and all jurisdiction is at the municipal level. Acuña obtained the necessary equipment in late 2014 and will put it to use as soon as possible. Officials in Nava report they are trying to identify funding that will allow the purchase of equipment and initiation of implementation in 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects							
1.5.01	Implement a competitive grants program aimed at local governments, dedicated to improvements in energy efficiency.	University of Texas at Austin, LBJ School	$175,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Complete all projects by August 2013.	The LBJ School made grants to six projects, all of which were completed by July 2013. The School issued the RFP in October 2012. An independent committee reviewed twenty-one applications and recommended six projects: two cities, an irrigation district, and three school districts. The University awarded grants to those entities, which subsequently completed their projects by the summer of 2013.
1.5.02	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila:	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been

	Quantification of the mitigation policies selected in Phase 1.						established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired, and a local coordinator and local experts recruited.
1.5.03	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$100,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	Five technical groups began work in July 2012. In 2013-14, the state strategy has been redesigned. A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired.
1.5.04	Research the potential for harnessing wind power for electricity in Tamaulipas.	SEMARNAT and SEDUMA (State of Tamaulipas)		SEMARNAT will seek funds	Delfino Ramirez, SEMARNAT, Delfino.ramirez@semarnat.tamaulipas.gob.mx	Conduct research and explore business opportunities.	This activity is a subset of project # 1.5.11. See the latter below.
1.5.05	Research the potential for harnessing wind power for electricity generation in Nuevo León.	SDS (Secretaría de Desarrollo Sustentable de Nuevo León)	$10,000	Mexican federal funds/CONACYT	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	Based on information from monitors installed by an independent party, SDS has generated a wind map with data with a resolution of 5 km. In the next stage, they will generate a map with a resolution of 1 km. They expect to have that ready in 2015.

ED_002319B_00013879-00005

1.5.06	Construct and operate a facility that extracts methane gas from the Nuevo Laredo landfill and burns it to generate electricity for the municipality.	Municipio de Nuevo Laredo and Setasa (Servicios de Tecnología Ambiental S.A.)	$3.5 million	Private sector; a company will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	Sergio Martínez López sergiomartinezlopez@hotmail.com	Have the facility in full operation by the end of 2014.	A feasibility study was completed 2008 with funding from USAID. Issuance of a tender for construction has been pending for several years; the municipio needs to obtain the property title. The project has been put on hold as of fall 2014.
1.5.07	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty, commercial drayage trucks in cross-border trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum.	SEMARNAT and the Municipio of Nuevo Laredo	$50,000	EPA border grant through the BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program), eduardo.olivares@semarnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program), valencia_osvaldo@hotmail.com	Complete the project by the end of 2014.	The project was completed in 2013. The study collected information from 456 companies and on 2,756 drayage trucks. Half of the sampled trucks were from model year 2000 or earlier, and 84 percent were model year 2006 or earlier. A final report summarized the information and offered information on retrofit technologies that could reduce emissions, and a workshop was held in Nuevo Laredo in September 2013.
1.5.08	Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	1,400,000	SEMA Coahuila	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region	Implementation was begun, but the schedule for completion has been extended by two or more years.

ED_002319B_00013879-00006

						and Saltillo Region, Coahuila.	In 2013 SEMA began working with local officials to include these projects in the plans of the applicable "Metropolitan Zones". A network will be deployed in Saltillo in 2015 and in Piedras Negras in 2016.
1.5.09	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Alejandra Carrera, SEMA/Coahuila, alejandra.carrera@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot retrofit technologies.	With assistance from the BECC, workshops were held in December 2013 in Piedras Negras and Acuña, disseminating information on how public buildings could be made more energy-efficient. No information is available regarding whether 10 pilot projects are being pursued.
1.5.10	Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Have a vehicle verification program in the border area of the state by end of 2014.	A pilot program focused on the state-owned fleet was initiated in early 2013. Additional implementation has been put on hold, with the hope that a program for private vehicles can be initiated in 2015.
1.5.11	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential in Tamaulipas.	SEDUMA (State of Tamaulipas)	Unknown	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Prepare action plan for nine wind power projects and state's strategic energy program.	In October 2014 SEDUMA hosted the Third International Congress on Renewable Energy in Cd. Victoria. The governor established an energy

							council with representatives from business, academia, and government. Promotion of renewable energy and efficiency was among its charges. The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of 2015. The state distributed guides on energy conservation for offices and schools, small businesses, industry, homes, automobiles, and public lighting systems. In addition, 16 companies set up a trust fund (fideicomiso) to expand renewable energy infrastructure in Tamaulipas.
1.5.12	Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA, EPA, and BECC	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	By 2014, the system will operate at 100% with programmatic consistency standards.	Eight municipalities have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Nuevo Laredo, Victoria, Mante, Tampico, Madero, and Altamira).

ED_002319B_00013879-00008

							Currently only three of these have their network in operation (Nuevo Laredo, Victoria, and Tampico).
1.5.13	Implement an environmental management system as a strategy for energy efficiency in Tamaulipas.	SEDUMA (State of Tamaulipas) and municipios	$ 100,000	SEDUMA, EPA, and COCEF	Ing. Humberto Rene Salinas, seduma@tamaulipas.gob.mx	By 2014, train 100% of the border municipalities.	State authorities trained 16 municipalities from the border region of Tamaulipas and the San Fernando Valley region. The workshop was held in Reynosa, with an attendance of approximately 100 people.
1.5.14	Support the attendance of school district officials from the border region at a statewide conference on energy efficiency.	The TCEQ, the LBJ School of Public Affairs at UT Austin, and border-region school districts	$ 27,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Support the attendance of operations staff and board members from nine school districts at the Clean Air through Energy Efficiency conference in November 2014.	In September 2014 the LBJ School of Public Affairs issued a solicitation of interest in September 2014 to 100 school districts in the border region. Seven districts applied and were granted support. One of the seven districts failed to show up at the conference.

Goal # 2: Improve Access to Clean and Safe Water

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
2.0.01	Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant.	Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)		SADM, BECC, and National	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com y Carlos Avila,	Have the plant in operation by the end of 2014.	The project was cancelled.

				Water Commission	carlos.avila@sadm.gob.mx		
2.0.02	Organize a "Water Awareness Summit" to educate the public in the Lower Rio Grande Valley about where their water comes from, how the planning process works, what the outlook is, and the importance of conservation.	Texas State Representative Eddie Lucio III, TCEQ, cities and their water utilities, the Rio Grande Regional Water Authority, and the Lower Rio Grande Valley Development Council	$10,000-15,000	Local funding efforts/sponsors	Claudia Lozano (TCEQ) claudia.lozano@tceq.texas.gov	Hold the conference in early 2013.	The first Water Awareness Summit was held in February 2013. More than 200 people attended and expressed interest in making the event annual. A second Summit was held in March 2014, with approximately 300 attendees. A third Summit was held in Dec 2014 with approximately 190 attendees.
2.0.03	Train the staff of small drinking water utilities in Texas' border region in best practices related to compliance with the U.S. Safe Water Drinking Act.	Texas A&M Engineering Extension Service	Less than $15,000	EPA	Bessie Orr Williams (Texas A&MM TEEX), Bessie.Williams@teex.tamu.edu	Hold workshops in three different locations in the Lower Rio Grande Valley in 2014, with at least one workshop in Spanish, and invite Mexican utilities.	The project was completed. Three identical workshops were held on successive days in September 2014 in Rio Grande, McAllen, and South Padre Island, Texas. A total of 68 utility staff persons attended, 20 of them from Mexico. The workshop in McAllen was provided in Spanish. Topics included basic water quality, groundwater production, surface water production, disinfection, and distribution.

Objective 1: Promote the increase in the number of homes connected to safe drinking water and adequate wastewater treatment.							
2.1.01	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila.	CEAS and SEMA (State of Coahuila)	$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Complete the studies by early 2014.	The feasibility studies were completed in 2013. CEAS was then making efforts to implement water management programs in those municipalities. No information has been available since then.
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	Provide teacher training workshop(s) and/or on-site facilitators to implement educational water quality monitoring events in conjunction with 2012/13 World Water Monitoring Challenge.	Texas Partnership for Water Education (TPWE): EPA, WEAT, TAWWA Scout Troops, ISDs, informal environmental education (EE) providers	Funding needed varies with # of participants(testing kits $25/ 30 individuals / site).	Various funding possibilities will be explored	Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Teachers &/or students, as well as interested community members will identify monitoring site, and sampling results will be submitted to TPWE's WWMC Program Coordinator.	The project was cancelled.
2.2.02 (Sub-obj. 2c)	Promote energy management practices among Texas water and wastewater utilities by conducting quarterly meetings on energy management planning, training on a pumping-system assessment tool, and on-site energy efficiency assessments (key cities include Laredo, Roma, Mission, Agua Specialty Utility District, Edinburg, McAllen, Pharr, Weslaco, Mercedes, Harlingen, and Brownsville).	Partner with a university to conduct meetings, trainings and on-site energy assessment involving engineering students.	Funding sought: $75,000/yr or $150,000	Various funding possibilities will be explored	David Reazin, EPA Region 6, (214) 665-7501, reazin.david@epa.gov	Hold quarterly meetings to develop energy management plan and benchmark energy use and costs, one PSAT training, and two on-site assessments.	A scaled-back project was completed. EPA partnered with the BECC instead of a university to organize a workshop in late September 2014 in Brownsville, Texas. Besides the Brownsville PUB as host, other participants included the City of Laredo and Laredo Water Utilities, the City of Pharr, the City of San Benito, the East Rio Honda WSC, McAllen Water Utilities, San Antonio Water

							Supply, the City of Weslaco, and Santa Cruz Irrigation District #15. Also in attendance were the Office of the Texas Secretary of State, the Community Resource Group, CPS Energy, and the Texas Water Development Board. Presenters and participants discussed beset energy management practices and exchanged experiences.
2.2.03	Organize a workshop in Laredo for water utilities and the restaurant industry to discuss best practices related to abatement of discharges of fats, oils, and grease (will also involve Nuevo Laredo).	City of Laredo water utility, Webb County, and Nuevo Laredo	$23,000	EPA border grant through the BECC	Karla Robles (City of Laredo Utilities) krobles@ci.laredo.tx.us	Hold the workshop by the spring of 2013 and then follow-up meetings with utilities to discuss implementation of FOG programs in the summer and fall of 2013.	The project was completed in January 2014. Laredo Utilities organized a binational workshop in March 2013, presenting "best management practices" with regard to management of fats, oils and grease. More than 350 people, including representatives from the maquiladora sector in Nuevo Laredo and restaurants in both cities, attended the event. Laredo Utilities then coordinated two follow-up meetings in August and December 2013, at which participants shared their experience in applying the practices, and also produced a 7-minute

							video about FOG management, for use in education of commercial establishments. Out of 22 establishments that participated in the original workshop, 14 decreased their amount of FOG generation more than 50%.
2.2.04	Conduct training for small businesses in the Reynosa area on best practices related to discharges of fats, oils, and grease (will include before and after measures).	Municipio of Reynosa	$16,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798, ecologiareynosa@hotmail.com	Organize a workshop or training event(s).	The project was canceled.
2.2.05	Implement a public campaign to increase awareness of problems of non-point-source pollution in the Lower Rio Grande Valley of Texas, through signs posted on roadways and at public facilities, messages on a school district television station, presentations at numerous public events and meetings, and newsletters of various organizations.	Fifteen cities in the Lower Rio Grande Valley (LRGV) that are members of the Texas Pollution Discharge Elimination System Stormwater Task Force, Texas A&M Kingsville, school districts, and NGOs	$40,000	EPA border grant through the BECC	Javier Guerrero (Lower Rio Grande Valley TPDES Stormwater Task Force, Texas A&M University-Kingsville), 956- 457-3023 jguer0351@aol.com	Complete the project by the end of 2013.	Workshops were coordinated with the Cities of Harlingen, San Benito, La Feria, Palm Valley, Primera, Weslaco, Donna, Alamo, San Juan, La Joya, Edinburg, Palmview, and Mission. A total of 104 signs were installed by those cities at various locations, and those locations were GPS'd.
2.2.07 (Sub-obj. 2b)	Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank (NADB)	Claudia López Aguilar (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) claudialopez@comapanuevolaredo.gob.mx	Complete the project by summer 2013.	BECC certified the project in September 2012, and all work is expected to be completed by January 2015. The objective was to address five sewer collection lines, all with upgrades. Of the five, one of them was been completed by mid-2014 and connected to the

							wastewater treatment system. The remaining four collectors were under repair and still discharging about 1.6 MGD to the stormwater system. Another discharge point from La Joya Creek was identified by COMAPA and will be repaired after an agreement is signed with a private property owner where it is located.
2.2.08 (sub-obj. 2c)	Hold workshops on energy efficiency for water utilities and perform energy audits of the utilities in five municipios in Tamaulipas—Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	BECC and the water utilities in Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	$250,000	EPA and BECC	Abdias Moreno (BECC), amoreno@cocef,org	Complete the project by 2014.	The project was completed. Workshops were held in 2013, and then final energy audits were presented at a meeting in Matamoros in early July 2014. The audits recommended retrofits requiring a total investment of $3.7 million, with average payback times of one-two years.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	Develop and produce region-specific supplemental materials necessary to produce a *Waters to the Sea*- Rio Grande module. (*Place-based education with comprehensive watershed focus).*	Center for Global Environmental Education (CGEE)-Hamline University, Harte Research Institute @ Texas A&M-Corpus Christi, EPA, WEAT, and AWWA	Approx $100,000 in 2013 $ 50,000 in 2014	Various funding possibilities will be explored	CGEE- Tracy Fredin Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Recruit and establish an advisory board, produce videos and other materials, identify one or two ISDs to pilot program, and conduct training for at least 25 teachers in 2014.	The project was cancelled.

2.3.03	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas, which are tributaries to the Rio Grande.	SEMA (State of Coahuila), Municipio de Piedras Negras and Municipio de Acuña	$400,000	Coahuila will fund first part and will be seeking funding for the rest	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Begin implementing the campaigns and conclude land conservation agreements by the end of 2014.	SEMA obtained EPA funding through the BECC in spring 2014 to restore and conserve the Arroyo Las Vacas. SEMA has developed partnerships with TCEQ, Ciudad Acuña, local academic institutions, and UT Austin. SEMA and BECC finalized the workplan and are negotiating the quality assurance project plan. In October 2014 in Cd. Acuña SEMA held a ribbon cutting for the Arroyo Las Vacas project and a complementary signing ceremony regarding land conservation. Several entities are collaborating on the development of a similar project for the San Rodrigo river. The projects will promote public awareness and take actions to improve the ecosystems of the arroyo and the river.
2.3.04	Implement a program to remove invasive plants in the Rio Grande.	SEMA (State of Coahuila), CONANP, Profauna	$85,000	SEMA (Coahuila), CONANP, Profauna – and will seek other funding sources	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sema.gob.mx	By the end of 2014, increase the activities of the invasive species plant removal program in the Rio Grande on the border of Coahuila.	No progress yet had been made by mid-2013. No information has been available since then.

2.3.05	Organize a regional workshop to disseminate "best practices" related to water conservation policy, programs (such as EPA's Water Sense), and public education, and implement enhanced programs in at least one pair of sister cities.	City of Laredo, EPA, TCEQ, TX Water Development Board, Piedras Negras Technological Institute	$6,000	City of Laredo, EPA, TCEQ, and local sponsors	Miguel A. Pescador mpescador@ci.laredo.tx.us Debora Browning EPA, Region 6 browning.debora@epa.gov	Hold a regional workshop in Laredo by spring 2013, and implement a new campaign in two sister cities by 2014. Enlist 10 new WaterSense Partners.	A day-long workshop was organized and hosted by Laredo in March 2013. More than 100 persons attended from both sides of the border, including Texas and Tamaulipas state agencies, and discussed conservation strategies. No new WaterSense Partners had been added by mid-2014 as a result of the workshop.
2.3.06 (Sub-Obj. 3a)	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly.holligan@tceq.texas.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Terms of reference were developed that serve as the framework used by participating entities in the collaboration. In February and July 2013, TCEQ hosted training sessions on water quality modeling software (QUAL-TX and LAQUAL) for Mexican agency and EPA staff. In July 2014 TCEQ began taking water samples in the target stretch of the Rio Grande for analysis. Mexican partners have not yet set a date for their sampling.

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila	Unknown	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarnat.tamaulipas.gob.mx Lic. Alejandro Manriquez Ramirez (SEMARNAT/Coahuila), educacion@coahuila.semarnat.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013. Hold an information exchange meeting w/Texas 2014	SEMARNAT implemented the program very successfully in Tamaulipas and on a very limited basis in Coahuila. No information is available from Nuevo León. By mid-2013 in Tamaulipas, 135 schools had been registered in the program—33 in Nuevo Laredo, 50 in Reynosa, and nine in Matamoros. SEMARNAT Coahuila has certified one school in Cd. Acuña for the program.
3.1.02	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers, and workshops at schools.	Cameron County and the Valley Proud Environmental Council	$10,000	Lower Rio Grande Valley Development Council, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the project by the end of 2013.	Cameron County and the Valley Proud Environmental Council engaged in a media campaign against illegal dumping, using billboards and newspapers throughout the Lower Rio Grande Valley. The two entities received numerous phone calls during the campaign,

ED_002319B_00013879-00017

							expressing concern about the trash that they had seen dumped throughout the valley.
3.1.03	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions.	The Cities of Pharr, Mission, McAllen, and Mercedes, and the Town of Bayview	$160,000	Lower Rio Grande Valley Development Council, TCEQ, and individual local government	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org (956) 682-3481	Finish the five separate but related projects by the end of 2013.	All cities except one completed their projects (Bayview cancelled its activity). The cities expanded and enhanced their recycling capabilities at their recycling centers by purchasing mobile recycling trailers, forklifts, and other equipment. Also, Pharr has introduced Curby the recycling robot in outreach activities.
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio of Nuevo Laredo		The City of Laredo Environmental Services local partners, and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), lnava1@ci.laredo.tx.us	Establish an organization in 2013 in Nuevo Laredo and affiliate with Keep America by the end of 2014.	The project's objectives are expected to be fully completed in early 2015. Reciclado en Acción/Fundación Verde was established in 2013, and initiated environmental awareness events in Nuevo Laredo. The City of Laredo Environmental Services will be covering the membership fees (about $6,000) for the organization to be affiliated with Keep America Beautiful.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public	Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program)	Install the bins at all elementary schools in 2013 and start relevant	The project was completed. Bins were installed in elementary schools and

	bins in parks, to include all elementary schools in Nuevo Laredo.				valencia_osvaldo@hotmail.com	environmental education programs for students.	environmental education conferences were resumed at the schools in February 2013.
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dr. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	This project was re-numbered and is now #6.0.07
3.1.09	Redesign and extend coverage of the *E-Conexion* newsletter as a strategy to share best practices.	SEDUMA (State of Tamaulipas)	$ 30,000	SEDUMA	Dra. Silvia Casas (SEDUMA), silviacasas757@gmail.com	Extend the dissemination of *E-Conexion* to 100% of the Tamaulipas municipalities.	SEDUMA expanded the electronic distribution to include 43 municipalities, all their state offices, environmentally certified schools (SIMA-E), and private industry. To save paper and ink, SEDUMA no longer prints and distributes hard copies. Minor changes were made to the design and the use of background colors is minimized.
3.1.10	Organize a visit to Austin, TX by private and public sector Mexican waste management specialists to see a model sanitary landfill and municipal recycling operation	Red Ambiental (headquartered in Monterrey, Nuevo León) Secretariat for Sustainable Development (State of Nuevo León), and the TCEQ (State of Texas)	Unknown	Red Ambiental	Eddie Moderow (TCEQ), eddie.moderow@tceq.texas.gov	Organize the visit for October 2014.	The project was completed. The visiting group included fourteen public- and private-sector officials from six Mexican states. They spent two days in Austin in October, talking with Austin City officials and TCEQ staff, and visiting the Texas Disposal Systems landfill in Creedmore and the

							Balcones Resources' recycling facility in Austin.
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat (State of Nuevo León), and TCEQ (State of Texas)	$35,000	EPA border grant through the BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com	Survey border municipalities on both sides of the border, prepare a "best practices" manual, and perhaps hold a regional workshop	The project was completed in 2013. SDS surveyed more than 20 local governments on both sides of the border and then developed a manual for local governments on best practices for scrap-tire management. With this manual as the focus, SDS collaborated with the TCEQ to organize a binational workshop held in March 2013. Representatives of 10 local governments plus state and federal governments, as well as private industry, attended the workshop.
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	SDS (Nuevo León), SEMARNAT, and Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo, Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	This particular project has been cancelled and replaced by a related but different project in the same municipio. See project # 3.2.08 below.
3.2.03	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, Texas.	Texas A&M University – Kingsville (TAMUK)	$15,000	EPA border grant through the BECC	Dr. Kim Jones kfkdj00@tamuk.edu	Through a demonstration project, assist communities in building capacity for	With the grant funds available, TAMUK managed a demonstration project that baled

						scrap-tire management.	approximately 62,500 scrap tires (625 bales) and used 125 of the bales as part of the sub-base of a section of a landfill road bed in Brownsville. TAMUK is looking for an additional $15-20K to use the remaining 500 bales and complete the extension of the road.
3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Significant progress was made. By mid-2013 compost was being generated by COMAPA and applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center. The utility subsequently began distributing compost to schools for landscaping and gardening and also uses it at COMAPA facilities. COMAPA uses 5 to 10% of all the bio solids generated at the wastewater treatment plant for the compost. In 2015 the utility expects to sign an agreement with the municipio to purchase equipment that will enable generation of more compost, and

							then begin selling it to commercial establishments and businesses.
3.2.05	Implement a collection and management program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	The program will be in full operation by spring 2013.	The program was in full operation in 2013, after the first steps had been taken in August 2012. In 2013, the city collected about 27.7 tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap-tire management program that includes valuation.	SEDUMA (Tamaulipas)	$ 400,000	SEDUMA/SEMARNAT/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Develop public policy and a management plan for scrap tires	The project is on hold.
3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA (Tamaulipas)	$ 300,000	SEDUMA/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Complete action plan	The project is on hold.
3.2.08	Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León.	SDS (Nuevo León) and Municipio of Sabinas Hidalgo, Nuevo León	$25,156	BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	Complete the study by 2015.	[This project is a replacement for project # 3.2.02, and was not initiated until mid-2014.] By the end of 2014, the study was 35% completed.

Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	Complete the remediation of old oxidation lagoons in Piedras Negras.	Municipio de Piedras Negras and SEMA (State of Coahuila)	$300,000	SEMA	Maria Teresa Molina, Municipio de Piedras Negras, teduada@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. Piedras Negras has not responded to inquiries

						extension to and a green area at the site.	about the project during 2013 and 2014.
3.3.02	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass.	City of Eagle Pass	$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.us	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Remediation of a portion of the site was carried out prior to 2010. The city will seek assistance through the TCEQ's Brownfields Site Assessments Program to determine whether the site meets the federal definition of a brownfields site and is eligible for funding under the EPA's brownfields program.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA (State of Coahuila), Municipio de Piedras Negras	$400,000	SEMA	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	By mid-2013, SEMA determined they needed to perform a feasibility study on using coal pits as disposal sites for scrap tires. No information has been available since then.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	Develop an emergency response plan for the maquiladoras in Brecha E-99 in Reynosa,Tamaulipas.	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park	$10,000	EPA border grant through the BECC	Dr. Emilio Sonderegger Arriola emilio.sonderegger@landisgyr.com		The project was canceled.

		Mutual Aid Committee)					
4.2.02	Hold a second "knowledge exchange" on risk mapping for first responders on both sides of the Lower Rio Grande Valley in Texas-Tamaulipas, for the purpose of identifying and gaining access to existing sources of data on hazmat storage and determining additional needs.	Fire departments from Texas and Mexican municipalities in the Gulf Task Force area, EPA, TCEQ, and Civil Protección for both Tamaulipas and Mexico	Unknown	EPA and NORTHCOM	Paige Delgado (EPA), Delgado.paige@epa.gov EPA Region 6	Hold the exchange during the first half of 2013	A first exchange was held in July 2012. The project is on hold because of the uncertainty of funding from NORTHCOM.
4.2.03	Hold a binational chemical-spill exercise at the World Trade Bridge between Nuevo Laredo, Tamaulipas and Laredo, Texas.	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	$5,000	EPA border grant through the BECC	Lic. Juan Ernesto Rivera Gómez (Civil Protección de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com or ernestorivera5775@hotmail.com	Hold the exercise after the U.S. and Mexican governments have approved permits that allow hazardous waste to be transported on this bridge.	The project is in progress. The U.S. Department of State issued a "presidential permit" in May 2014 to allow the crossing of hazardous materials. The Mexican government is awaiting the completion of a water quality study on the Rio Grande that CONAGUA required before the permit is issued. If and when a Mexican permit is issued and both nations sign diplomatic notes, local officials will organize a binational exercise.
4.2.04	Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	$5,000 - will be looking for funders	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho (Protección Civil de Nuevo León). jorge.camacho@nueveoleon.gob.mx	Add the Solidarity Bridge, which is upstream from Laredo and Nuevo Laredo, to the Joint Contingency Plan for Laredo and Nuevo Laredo by the end of 2013.	See the following project (4.2.05).

	hazardous materials in the area are currently directed to this bridge.						
4.2.05	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department), evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com	Hold new meetings of the staff of the two cities in 2013 in order to re-visit the language of the draft revision and possibly develop alternative language.	The project is on hold. Laredo officials met in May 2013 to make changes to one sentence in a draft of the new cross-border contingency plan that had been originally prepared in 2009. The changes were intended to clarify that Laredo could not send personnel across the border, because of security and liability concerns, but could assist in other ways. The revised agreement was been approved subsequently by Nuevo Laredo, but has been awaiting action by the Laredo City Council since that time.
4.2.06	Update and improve the cross-border contingency plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b) Del Rio, Texas and Ciudad Acuna, Coahuila, which will include risk analysis and development of risk maps.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de Ciudad Acuña, BECC, and Consultoria y Servicios en Seguridad Industrial y Medio Ambiente S.A. de C.V	$130,000	EPA border grant through the BECC	Briselda Duarte (Border Environment Cooperation Commission), bduarte@cocef.org and M.C. Mónica de Jesús Pérez Morales (Consultoría y Servicios en Seguridad Industrial y Medio Ambiente, S.A. de C.V.)	Complete new plans by the end of 2013.	Begun in 2012, the project was completed by the end of 2013. Under contract from the BECC, two workshops were organized in the first half of 2012 for staff from the two pairs of sister cities to discuss protocols and risks. After delays and the hiring of a new contractor, additional

							workshops were held in July 2013. In November of that year, the two sister-city pairs each signed a Memorandum of Cooperation for new cross-border contingency plans. Each community committed to providing resources and mutual aid in case of chemical accidents.

Multi-Goal Projects

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	Organize educational campaigns featuring training sessions for health professionals, health students, and promotoras followed by community outreach in the Laredo and Harlingen areas in Texas, addressing how to reduce pre-natal and childhood exposure to pesticides, lead, solvents, second-hand tobacco, and diesel exhaust.	The University of Texas Health Science Center in San Antonio	$50,000	EPA border grant through the BECC	Claudia Miller, M.D., MillerCS@uthscsa.edu or steer@uthscsa.edu	Complete the project by the end of 2013.	The project was fully implemented in 2013. Two training sessions were held for 40 promotoras (lay healthcare workers)—20 from in the N. Laredo/ Laredo area and 20 from the Cameron County and adjoining municipios in Tamaulipas. The classes covered 17 types of potentially hazardous exposures during pregnancy and childhood, and how to avoid these exposures. Subsequent to the training, the

							promotoras provided outreach to 400 pregnant women or mothers with young children in a three-month period. Each of those families made an oral commitment to discuss lessons learned with two other families.
6.0.02	Conduct educational workshops/plays on the safe handling and disposal of pesticides for farm workers in the Lower Rio Grande Valley of Texas and in the Laredo area.	Migrants in Action – Weslaco, Texas	$20,000	EPA border grant through the BECC	Noemi Ochoa (Association of Farmworker Opportunity Programs), nochoa@yahoo.com	Produce the EPA-written play "El Moscas y los Pesticidas" using students in two cities in the first half of 2013	The project was completed in 2013-- Student groups in Laredo and Edinburg performed the play before more than 2,000 people.
6.0.03	Develop of a binational repository of databases on environmental stresses and public health effects.	Texas A&M Health Science Center, School of Rural Public Health, PAHO, BECC, HIDA-REY COBINA, Hidalgo County Health Dept.	$50,000	EPA border grant through the BECC	Genny Carrillo (Texas A&M Health Science Center, School of Rural Public Health), gcarrillo@srph.tamhsc.edu	Review the literature, build a cross-border partnership of professionals at the local, state, and national levels, identify health hazards in the environment and relevant indicators, and build a binational repository of databases by the end of 2013.	Project staff accomplished as much as possible during the grant period, but encountered unanticipated difficulties with selected objectives. The project reviewed literature, and talked with health professionals on the U.S. side, and established a repository of U.S. databases. The project made contact with professionals in Mexico but had difficulty finding relevant databases on that side of the border that were not outdated. The project also discovered that the

							Mexican professionals use different parameters than are used in the United States.
6.0.04	Address children's environmental health issues in Laredo, Texas and Webb County by surveying a sample of homes and identifying health risks, tracking reported exposures through selected hospitals and clinics, developing and implementing a public outreach campaign regarding the identified risks, and identifying and publicizing two relevant online courses available for physicians.	Laredo Health Department	$50,000	EPA border grant through the BECC	Waldo Lopez (City of Laredo Health Department) wlopez@ci.laredo.tx.us	Complete the project by the end of 2013.	Laredo completed the project by the end of 2013. Project staff surveyed the use of pesticides and household hazardous materials in more than 135 homes. More than 50 physicians and health providers were trained on diagnosing illnesses related to pesticide exposure through the use of a web-based diagnostic tool, allowing them to assist survey respondents with symptoms related to pesticide exposure. Staff distributed publications on lead and pesticides to over 120 homes.
6.0.05	Organize annual Environmental Summits for the public in the Lower Rio Grande Valley, in cooperation with State Representative Eddie Lucio III's office.	TCEQ, and cities in the Lower Rio Grande Valley	$15,000	Local sponsors , EPA	Imelda Pena, TCEQ Imelda.pena@tceq.texas.gov	Hold Environmental Summits in the fall of 2013 and in the fall of 2014.	The fourth annual Valley Environmental Summit was held in October 2013. An estimated 300 people attended. Their priority interests were illegal dumping, marine debris, and community cleanup programs. The fifth summit was held in October 2014 with

							approximately 350 attendees. The topics of interest were sustainability, local enforcement programs and household hazardous waste programs.
6.0.06	Organize annual Environmental Summits for the public in Webb County, in cooperation with State Senator Judith Zaffirini's office.	TCEQ and the City of Laredo	$15,000	Local sponsors , EPA	Carmen Ramirez, TCEQ , carmen.ramirez@tceq.texas.gov	Hold Environmental Summits in the fall of 2013 and 2014.	Environmental Summits were held in Laredo in October 2013 and November 2014. These were the fourth and fifth in an annual series. The 2013 Summit had more than 400 attendees. Speakers discussed recycling, energy efficiency, and water conservation. The 2014 Summit had a theme of "Focus on Nature" and targetted high school students, who comprised a majority of the 325 attendees. Topics included weather preparedness and energy efficiency. There were also hands-on activities on building a natural habitat and sampling water quality parameters.
6.0.07 (formerly 3.1.08)	Extend Tamaulipas' state program in promoting environmental management systems (SIMA) to more schools and government offices.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dra. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SEDUMA made significant progress in expanding the use of its guidelines for environmental

							management programs. SIMA's educational division enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a total of 26,000 students. The schools also received equipment such as low-flow water toilets, recycling containers, and energy-efficient light bulbs. SIMA's institutional division trained more than 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs and reduced energy costs 13.03% from January to August 2014. Tamaulipas will expand both programs to more schools and state offices in 2015.

Project Id	Project Name
20240	Communities United in Prevention of Environmental Pollution
20241	Characterization of drayage activities and emissions in Laredo-Nuevo Laredo airshed
20243	Keeping Pharr Beautiful...Starts at Home
20245	Conservation Arroyo Las Vacas in Acuña, Coahuila, Mexico.
20246	Waste generation Diagnostic in the Noresat border region
20247	Biosolids Recycling in Agriculture in the Valle de Juarez
20248	Urban Keyhole Gardens using Rain Water Harvesting Techniques
20249	Improving the Monitoring of PM10 in Ojinaga
20251	Planning Model for an Environmental and Health Texas/Mexico Border Information Exchange Program
20252	Promotora-Led Environmental Health Education for Children, Eagle Pass, Texas
20253	Management of Fat, Oil and Grease in Nuevo Laredo
20255	Alamo's recycling solid waste systems improvements through a holistic approach.
20256	Tire Amnesty Collection Events in El Paso County
20257	Scrap Tire Collection Program, City of Pharr
20258	Determining the Ideal Bioswale Porous Material for South Texas Stormwater Management

Printed On: February 2, 2016

20260	Sustaining the Environment at the New Mexico-Chihuahua Border
20261	Play: El Moscas Y Los Pesticidas.
20262	Ysleta del Sur Pueblo Community Collection Center
20270	Hazardous Materials First Resppnders Binational Training
20271	Hazardous Railcar Leak Mitigation El Paso_Juarez_Dona Ana Region
20283	Workshop on Energy Efficiency in Public Lighting Systems in Tamaulipas
20285	Comprehensive management project of solid waste in Rio Bravo and Valle Hermoso, Tamaulipas
20286	Comprehensive management of electronic waste project in Piedras Negras and Eagle Pass, Texas
20287	Binational Tabletop and Functional Exercises between the cities of Harlingen and Matamoros
20288	Environmental services in well-managed rangelands of the Chihuahuan Desert
20290	The Rio Grande/Río Bravo Water Quality Initiative

Printed On: February 2, 2016

20291	Fat, Oil and Grease (FOG) Public Outreach Campaign
20293	Law Reform and Environmental Education in Nuevo Laredo
20294	Clean in up program at City of Pharr, Texas
20295	Electronic Waste Management project in Ciudad Acuna, Piedras Negras and Guerrero in Coahuila
20297	Decision Making Tool (DMTG) for Stormwater in The lower Rio Grande Valley in Texas
20298	Sewage sludge and biosolids Agricultural Soils project in the Valle de Juarez
20302	Green Infrastructure in Public Space on Valle del Sol Avenue
20303	Vivienda sustentable y resiliente area poniente en Ciudad Juárez, Chihuahua
20304	Comprenhensive program to improve Air Quality basins in Northen State of Chihuahua

Printed On: February 2, 2016

Project Description	Goal	Status
The purpose of the project is to implement a training program related to proper maintenance of septic tanks in the communities of Montana Vista, Cuadrilla and Valle Bonito in El Paso County Texas	Goal 2	Concluded
A detailed characterization of the activity of the trucks in the region of Laredo-Nuevo Laredo, provide an understanding of the regional activity of the trucks and their implications for air quality, responsible for state and local transportation agencies border and air quality. With this information, decision makers and planners can develop strategies and policies that address the needs of transportation and air quality in the region as a binational regional level. The data, methodologies and information generated by the project could potentially be used to characterize the activities of trucks in other locations along the border.	Goal 1	Concluded
Increase outreach and awareness surrounding illegal dumping, also help the cities beautification efforts by increasing volunteer opportunities and encouraging the labors of community cleanup programs such as Operation Clean Sweep.	Goal 3	Concluded
This project involves the conservation and recovery of Arroyo Las Vacas, this being a tributary of the Rio Grande river which crosses the border city of Acuna.	Goal 2	Concluded
Implement a comprehensive management plan for the management of hazardous solid waste, special handling waste in medium-sized communities in the northeastern state of Nuevo León	Goal 3	Concluded
To determine the effect of biosolids in soils' physical and chemical properties, the plant's agronomic response and the economic return due to reduction in the use of chemical fertilizers and soil and environmental improvements	Goal 3	Concluded
Demonstrate that urban landscapes can incorporate small scale intensive growing beds to grow a variety of plants using rainfall and runoff and very minimal supplemental irrigation.	Goal 2	Concluded
The project is to provide training and training of technical personnel in the municipality of Ojinaga in the operation of the monitoring network of air quality particulate	Goal 1	Concluded
The overall goal of this project is to develop the framework for a system, including processes in phases and specific steps, required for the development of a bi-national environmental and health tracking system.	Goal 2	Concluded
The promotora (community health worker) model will be used for reaching out to parents and care givers, school teachers and child care providers with the aim of improving environments in and around the home, school and childcare facility.	Goal 4	Concluded
Disseminate to all generators of fats and oils as well as proper disposal retainer cleaning grease traps and the consequences that brings pour fats and oils down the drain.	Goal 3	Concluded
Increase the volume of collected recyclables, create environmental stewardships through education, create an identifiable solid waste mascot, and bring together all identifiable stakeholders to bring about holistic change within the community.	Goal 3	Concluded
Hold 4 tire collection Events en El Paso County. Print and Distribute a Flyer on "How To Report Illegal Dumping"	Goal 3	Concluded
The City of Pharr will implement a scrap tire collection event during their monthly Operation "Clean Sweep", community clean up event.	Goal 3	Concluded
To evaluate performance of parking lot bioswale by comparing its stormwater discharges and solids against those of conventional parking lot with no bioswale,to develop the best performing bioswale mixture from the materials tested in the prototype bioswales.	Goal 2	Concluded

Printed On: February 2, 2016

1) Provide three (3) educational presentations to the public, one each in the border cities of Las Cruces, Columbus and Deming; 2)Provide four (4) educational workshops to septic system owners in underserved areas of Luna County; 3)Provide two (2) Knowledge Exchange events for Luna County, one each in Deming and Columbus, on water conservation; 4)Initiate planning efforts for updating the 2002 Columbus/Ascensión/Palomas Sister City Cross Border Contingency Plan	Goal 1	Concluded
As part of the Workers Protection Standard(WPS), EPA Region 6 developed a humorous and educational script (in Spanish) named "El Moscas y Los Pesticidas", consisting of several characters showing how farm workers and their families can prevent exposures to pesticides	Goal 3	Concluded
the project consists in a community collection center that will receive electronic waste (e-waste), household hazardous waste (HHW), used tires and recyclable material.	Goal 3	Concluded
The project objective is to strength the response capacity providing proper training and equipment to hazmat first responders in the areas of McAllen-Mission-Pharr-Reynosa. More than 100 hazardous-material carrying trucks travel through the ports of entry in South Texas. The McAllen Fire Department staff in conjunction with the Mission and Pharr Fire Departments will join forces to work together to update the emergency notification related to hazmat emergencies.	Goal 4	Concluded
The project will enhance the region's capability to mitigate hazardous railcar leaks. The project will involve one day training event, each community will receive kits to provide train the trainer sessions.	Goal 4	Concluded
Train at least 30 public officials from 10 municipalities with basic tools to achieve greater energy efficiency and that this is reflected in a decrease in the emission of greenhouse gases into the atmosphere and in turn into economic savings for municipal utilities	Goal 1	Concluded
The project consists in conduct a Basic Diagnosis on the Comprehensive Management of Municipal Solid Waste in the municipalities of Rio Bravo and Valle Hermoso	Goal 2	Concluded
The project consists of a program of environmental education and health to join efforts in collecting electrical and electronic solid waste in the city of Piedras Negras, Coahuila e Eagle Pass in Texas.	Goal 3	To conclud in September 2017
The City of Harlingen Fire Department, proposes to advance on Goal 4, Objective 2 by the implementation of a hazmat training, a tabletop, and a functional exercise. Proposed Scenario consists of a tanker trailer roll-over accident carrying a petro product spilling into Mexico waterways. The City of Harlingen presnts a sister city agreement since 2014 to support mutual emergency response aid. Project will involve partnering with first responders from Matamoros and Cameron County. The project will help to promote sustainability by practicing the last update of the sister contingency plan to evaluate its reliability.	Goal 4	Concluded
The Universidad Autonoma de Chihuahua, proposes to advance on Goal 1, objective 1 by the implementation of a sustainable solution to mitigate dust control in the areas of Ascension and Palomas in Chihuahua. The proposed solution is to implement a planned pasturage process to grow grassland. Project will implement a baseline monitoring system and training on recovery practices of 68,000 has.	Goal 1	In Progress
The University of Texas at Austin (UT), proposes to advance on Goal 2, Objective 3 by providing information to local binational stakeholders, about sources of water pollution to the Rio Grande and by gathering information from key stakeholders about potential local solutions to the river's water quality problems in the portion of the river between Falcon Dam and the Gulf of Mexico. The project proposes to organize 5 workshops and develop MOU among stakeholders.	Goal 2	In Progress

Printed On: February 2, 2016

The Brownsville Public Utilities Board, a government entity, proposes to advance on Goal 2, Objective 2 by implementing a public FOG campaign, targeting businesses with violations and reaching out to them. It will also provide education through community outreach and public awareness through 4 quarterly workshops. The grant will help leverage funds of $49,561 from the City.	Goal 2	Concluded
The Universidad Autónoma de Tamaulipas, proposes to advance on Goals 2, 3 and 5 by improving the implementation of environmental legislation, strengthen the environmental cooperation and exchange of information between Nuevo Laredo, Tamaulipas and Laredo, Texas, and train environmental inspectors and staff of the municipal environmental unit. The grant will help leverage funds with $5,500 from Universidad Autónoma of Tamaulipas.	Goal 5	In Progress
The project consists in educate City of Pharr residents on environmental sustainability and related proper solid waste disposal methods.	Goal 3	Concluded
Inform and educate residents about the benefits of reusing electronics; the need to practice responsible consumption, as well as the importance of giving an appropriate final destination for these wastes	Goal 4	Concluded
The project will promote specific research and educational topics emphasizing how green infrastructure strategies can be utilized to mitigate stormwater runoff.	Goal 2	In Progress
The project consists in establish a sustainable program that allows the proper disposal of biosolids on agricultural soils in the region.	Goal 3	In Progress
Using green infrastructure techniques establish passive rainwater harvesting systems on a community park in the intersection of Avenue Valle del Sol and Solares street, in Cd. Juarez Chihuahua.	Goal 2	In Progress
Identifying and including green building and infrastructure elements for progressive home building projects in low-income communities of the western area of Ciudad Juarez, The project will seek to identify and include technical assistance services to advance innovative mechanisms, tools, and products (technologies) for building resiliency in housing units. Additionally, t	Goal 2	In Progress
Establish measures for ProAire of the State of Chihuahua from carrying out thematic workshops with the participation of the federal, state and municipal government and the industrial, academic and social sectors.	Goal 1	Concluded

Printed On: February 2, 2016

State	Awarded Amount	RFP	Region
TX	$ 49,776.41	2013	R6
TX	$ 89,750.00	2013	R6
TX	$ 19,830.86	2013	R6
COAH	$ 44,200.00	2013	R6
COAH	$ 17,457.46	2013	R6
CHIH	$ 44,850.00	2013	R6
TX	$ 6,120.08	2013	R6
CHIH	$ 13,375.36	2013	R6
COAH	$ 39,875.00	2013	R6
TX	$ 69,083.50	2013	R6
TAMPS	$ 32,533.00	2013	R6
TX	$ 54,836.16	2013	R6
TX	$ 15,000.00	2013	R6
TX	$ 15,000.00	2013	R6
TX	$ 26,022.00	2013	R6

Printed On: February 2, 2016

NM	$ 36,963.43	2013	R6
NM	$ 20,000.00	2013	R6
TX	$ 66,470.00	2013	R6
TX	$ 45,455.00	2013	R6
TX	$ 30,000.00	2013	R6
TAMPS	$ 9,385.00	2015	R6
TAMPS	$ 20,866.00	2015	R6
COAH	$ 36,054.00	2015	R6
TX	$ 44,683.00	2015	R6
CHIH	$ 41,388.00	2015	R6
TX	58575	2015	R6

Printed On: February 2, 2016

TX	$ 25,000.00	2015	R6
TAMPS	$ 11,000.00	2015	R6
TX	$ 36,390.00	2015	R6
COAH	$ 16,777.20	2015	R6
TX	$ 38,885.00	2015	R6
CHIH	$ 48,510.00	2015	R6
CHIH	$ 43,204.00	2015	R6
CHIH	$ 50,000.00	2015	R6
CHIH	$ 25,000.00	TR2-2016	R6

Printed On: February 2, 2016

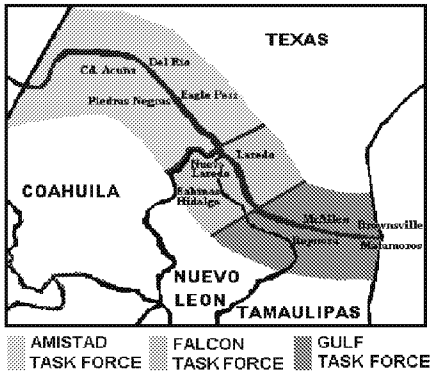
BORDER 2020

FINAL REPORT ON THE 2013-2014 Action Plan

for the TX-COAH-TAMP-NL Regional Workgroup

December 2014

(original plan published in October 2012)



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
   a. Analyze emissions and emission sources in specific airsheds
   b. Engage in both road-paving and reforestation (using native species)
   c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
   d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
2. Improve water quality by taking the following actions:
   a. Evaluate the portion of the Rio Grande watershed that is in the region
   b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
   c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
   d. Develop more applications for the re-use of water
   e. Reduce non-native species in the water bodies
   f. Continue and expand environmental education efforts such as “Adopt the River” and “Day of the River”

ED_002319B_00013888-00001

3. Address problems of improper waste disposal:
    a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
    b. Expand environmental education related to waste issues
    c. Close and remediate open dumps wherever required by regulation
4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Reduction of energy consumption in buildings and street lighting
2. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
3. Construction of sanitary landfills
4. Attention to waste disposal in gas drilling operations
5. Continuing attention to emergency response
6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
7. Improvement of vehicle inspection programs in Coahuila
8. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Re-use of treated water
2. Monitoring of drilling operations in the Eagle Ford Shale
3. Finalizing the cross-border contingency plan

Gulf Task Force

1. Improvement of water-related infrastructure, and increased attention to water conservation and re-use
2. Increased recycling
3. Continuing capacity-building at the local, state, and federal levels of government
4. Technical exchanges, including best practices and lessons learned

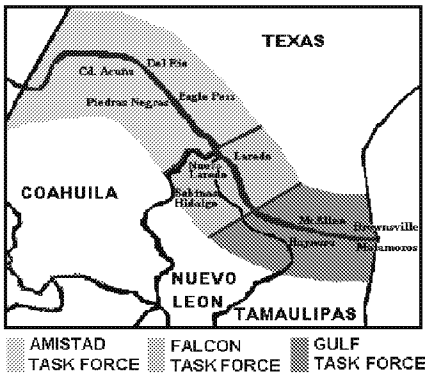
ED_002319B_00013888-00002

Border 2020

2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



Note: This Border 2020 Action Plan does not include infrastructure projects related directly to Border 2020 goals and objectives in air, water, and waste that have been financed in part or in full by the binational North American Development Bank. For information on those projects, see http://www.nadbank.org/.

GOAL # 1: Reduce Air Pollution

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures							
1.1.01	Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (State of Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ (State of Texas)	$700,000	Originally SEMA (State of Coahuila); now the municipios	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, Monclova, Saltillo, and Ramos Arizpe.	Implementation is in progress. The original commitment was made by a former

							administration in Coahuila. The current administration reports that no state funding is available and all jurisdiction is at the municipal level. Acuña obtained the necessary equipment in late 2014 and will put it to use as soon as possible. Officials in Nava report they are trying to identify funding that will allow the purchase of equipment and initiation of implementation in 2015.
Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects							
1.5.01	Implement a competitive grants program aimed at local governments, dedicated to improvements in energy efficiency.	University of Texas at Austin, LBJ School	$175,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Complete all projects by August 2013.	The LBJ School made grants to six projects, all of which were completed by July 2013. The School issued the RFP in October 2012. An independent committee reviewed twenty-one applications and recommended six projects: two cities, an irrigation district, and three school districts. The University awarded grants to those entities, which subsequently completed their projects by the summer of 2013.
1.5.02	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Coahuila: Quantification of the mitigation policies	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Econometric evaluation of the mitigation policies selected in Phase 1.	A Comité Intersecretarial ante el Cambio Climático (CICC) has been

	selected in Phase 1.						established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired, and a local coordinator and local experts recruited.
1.5.03	Initiate Phase 2 of the State Climate Action Plan (PEAC) for Tamaulipas: Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$100,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Selection of a number of prioritized mitigation public policies for climate change.	Five technical groups began work in July 2012. In 2013-14, the state strategy has been redesigned. A Comité Intersecretarial ante el Cambio Climático (CICC) has been established, as well as Integrated Technical Working Groups (TWG) and the Advisory Group (AG). A consultant has been hired.
1.5.04	Research the potential for harnessing wind power for electricity in Tamaulipas.	SEMARNAT and SEDUMA (State of Tamaulipas)		SEMARNAT will seek funds	Delfino Ramirez, SEMARNAT, Delfino.ramirez@semarnat.tamaulipas.gob.mx	Conduct research and explore business opportunities.	This activity is a subset of project # 1.5.11. See the latter below.
1.5.05	Research the potential for harnessing wind power for electricity generation in Nuevo León.	SDS (Secretaría de Desarrollo Sustentable de Nuevo León)	$10,000	Mexican federal funds/CONACYT	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	Based on information from monitors installed by an independent party, SDS has generated a wind map with data with a resolution of 5 km. In the next stage, they will generate a map with a resolution of 1 km. They expect to have that ready in 2015.

ED_002319B_00013888-00005

1.5.06	Construct and operate a facility that extracts methane gas from the Nuevo Laredo landfill and burns it to generate electricity for the municipality.	Municipio de Nuevo Laredo and Setasa (Servicios de Tecnología Ambiental S.A.)	$3.5 million	Private sector; a company will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	Sergio Martínez López sergiomartinezlopez@hotmail.com	Have the facility in full operation by the end of 2014.	A feasibility study was completed 2008 with funding from USAID. Issuance of a tender for construction has been pending for several years; the municipio needs to obtain the property title. The project has been put on hold as of fall 2014.
1.5.07	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty, commercial drayage trucks in cross-border trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum.	SEMARNAT and the Municipio of Nuevo Laredo	$50,000	EPA border grant through the BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program), eduardo.olivares@semarnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program), valencia_osvaldo@hotmail.com	Complete the project by the end of 2014.	The project was completed in 2013. The study collected information from 456 companies and on 2,756 drayage trucks. Half of the sampled trucks were from model year 2000 or earlier, and 84 percent were model year 2006 or earlier. A final report summarized the information and offered information on retrofit technologies that could reduce emissions, and a workshop was held in Nuevo Laredo in September 2013.
1.5.08	Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	1,400,000	SEMA Coahuila	Humberto Fuentes, SEMA/Coahuila, humberto.fuentes@coahuila.gob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region,	Implementation was begun, but the schedule for completion has been extended by two or more years.

						Coahuila.	In 2013 SEMA began working with local officials to include these projects in the plans of the applicable "Metropolitan Zones". A network will be deployed in Saltillo in 2015 and in Piedras Negras in 2016.
1.5.09	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Alejandra Carrera, SEMA/Coahuila, alejandra.carrera@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot retrofit technologies.	With assistance from the BECC, workshops were held in December 2013 in Piedras Negras and Acuña, disseminating information on how public buildings could be made more energy-efficient. No information is available regarding whether 10 pilot projects are being pursued.
1.5.10	Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Have a vehicle verification program in the border area of the state by end of 2014.	A pilot program focused on the state-owned fleet was initiated in early 2013. Additional implementation has been put on hold, with the hope that a program for private vehicles can be initiated in 2015.
1.5.11	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential in Tamaulipas.	SEDUMA (State of Tamaulipas)	Unknown	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Prepare action plan for nine wind power projects and state's strategic energy program.	In October 2014 SEDUMA hosted the Third International Congress on Renewable Energy in Cd. Victoria. The governor established an energy

							council with representatives from business, academia, and government. Promotion of renewable energy and efficiency was among its charges. The most successful renewable development occurred with wind energy. As of January 2014, companies had registered 26 wind farm proposals, with total potential capacity of nearly 2,600 MW. Three of the projects are expected to be in operation by the end of 2015. The state distributed guides on energy conservation for offices and schools, small businesses, industry, homes, automobiles, and public lighting systems. In addition, 16 companies set up a trust fund (fideicomiso) to expand renewable energy infrastructure in Tamaulipas.
1.5.12	Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA (State of Tamaulipas)	To be defined	SEDUMA, EPA, and BECC	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	By 2014, the system will operate at 100% with programmatic consistency standards.	Eight municipalities have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Nuevo Laredo, Victoria, Mante, Tampico, Madero, and Altamira).

							Currently only three of these have their network in operation (Nuevo Laredo, Victoria, and Tampico).
1.5.13	Implement an environmental management system as a strategy for energy efficiency in Tamaulipas.	SEDUMA (State of Tamaulipas) and municipios	$ 100,000	SEDUMA, EPA, and COCEF	Ing. Humberto Rene Salinas, seduma@tamaulipas.gob.mx	By 2014, train 100% of the border municipalities.	State authorities trained 16 municipalities from the border region of Tamaulipas and the San Fernando Valley region. The workshop was held in Reynosa, with an attendance of approximately 100 people.
1.5.14	Support the attendance of school district officials from the border region at a statewide conference on energy efficiency.	The TCEQ, the LBJ School of Public Affairs at UT Austin, and border-region school districts	$ 27,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Support the attendance of operations staff and board members from nine school districts at the Clean Air through Energy Efficiency conference in November 2014.	In September 2014 the LBJ School of Public Affairs issued a solicitation of interest in September 2014 to 100 school districts in the border region. Seven districts applied and were granted support. One of the seven districts failed to show up at the conference.

Goal # 2: Improve Access to Clean and Safe Water

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
2.0.01	Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant.	Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)		SADM, BECC, and National Water	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com y Carlos Avila,	Have the plant in operation by the end of 2014.	The project was cancelled.

				Commission	carlos.avila@sadm.gob.mx		
2.0.02	Organize a "Water Awareness Summit" to educate the public in the Lower Rio Grande Valley about where their water comes from, how the planning process works, what the outlook is, and the importance of conservation.	Texas State Representative Eddie Lucio III, TCEQ, cities and their water utilities, the Rio Grande Regional Water Authority, and the Lower Rio Grande Valley Development Council	$10,000-15,000	Local funding efforts/sponsors	Claudia Lozano (TCEQ) claudia.lozano@tceq.texas.gov	Hold the conference in early 2013.	The first Water Awareness Summit was held in February 2013. More than 200 people attended and expressed interest in making the event annual. A second Summit was held in March 2014, with approximately 300 attendees. A third Summit was held in Dec 2014 with approximately 190 attendees.
2.0.03	Train the staff of small drinking water utilities in Texas' border region in best practices related to compliance with the U.S. Safe Water Drinking Act.	Texas A&M Engineering Extension Service	Less than $15,000	EPA	Bessie Orr Williams (Texas A&MM TEEX), Bessie.Williams@teex.tamu.edu	Hold workshops in three different locations in the Lower Rio Grande Valley in 2014, with at least one workshop in Spanish, and invite Mexican utilities.	The project was completed. Three identical workshops were held on successive days in September 2014 in Rio Grande, McAllen, and South Padre Island, Texas. A total of 68 utility staff persons attended, 20 of them from Mexico. The workshop in McAllen was provided in Spanish. Topics included basic water quality, groundwater production, surface water production, disinfection, and distribution.

Objective 1: Promote the increase in the number of homes connected to safe drinking water and adequate wastewater treatment.							
2.1.01	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila.	CEAS and SEMA (State of Coahuila)	$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Complete the studies by early 2014.	The feasibility studies were completed in 2013. CEAS was then making efforts to implement water management programs in those municipalities. No information has been available since then.
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	Provide teacher training workshop(s) and/or on-site facilitators to implement educational water quality monitoring events in conjunction with 2012/13 World Water Monitoring Challenge.	Texas Partnership for Water Education (TPWE): EPA, WEAT, TAWWA Scout Troops, ISDs, informal environmental education (EE) providers	Funding needed varies with # of participants(testing kits $25/ 30 individuals / site).	Various funding possibilities will be explored	Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Teachers &/or students, as well as interested community members will identify monitoring site, and sampling results will be submitted to TPWE's WWMC Program Coordinator.	The project was cancelled.
2.2.02 (Sub-obj. 2c)	Promote energy management practices among Texas water and wastewater utilities by conducting quarterly meetings on energy management planning, training on a pumping-system assessment tool, and on-site energy efficiency assessments (key cities include Laredo, Roma, Mission, Agua Specialty Utility District, Edinburg, McAllen, Pharr, Weslaco, Mercedes, Harlingen, and Brownsville).	Partner with a university to conduct meetings, trainings and on-site energy assessment involving engineering students.	Funding sought: $75,000/yr or $150,000	Various funding possibilities will be explored	David Reazin, EPA Region 6, (214) 665-7501, reazin.david@epa.gov	Hold quarterly meetings to develop energy management plan and benchmark energy use and costs, one PSAT training, and two on-site assessments.	A scaled-back project was completed. EPA partnered with the BECC instead of a university to organize a workshop in late September 2014 in Brownsville, Texas. Besides the Brownsville PUB as host, other participants included the City of Laredo and Laredo Water Utilities, the City of Pharr, the City of San Benito, the East Rio Honda WSC, McAllen Water Utilities, San Antonio Water

							Supply, the City of Weslaco, and Santa Cruz Irrigation District #15. Also in attendance were the Office of the Texas Secretary of State, the Community Resource Group, CPS Energy, and the Texas Water Development Board. Presenters and participants discussed beset energy management practices and exchanged experiences.
2.2.03	Organize a workshop in Laredo for water utilities and the restaurant industry to discuss best practices related to abatement of discharges of fats, oils, and grease (will also involve Nuevo Laredo).	City of Laredo water utility, Webb County, and Nuevo Laredo	$23,000	EPA border grant through the BECC	Karla Robles (City of Laredo Utilities) krobles@ci.laredo.tx.us	Hold the workshop by the spring of 2013 and then follow-up meetings with utilities to discuss implementation of FOG programs in the summer and fall of 2013.	The project was completed in January 2014. Laredo Utilities organized a binational workshop in March 2013, presenting "best management practices" with regard to management of fats, oils and grease. More than 350 people, including representatives from the maquiladora sector in Nuevo Laredo and restaurants in both cities, attended the event. Laredo Utilities then coordinated two follow-up meetings in August and December 2013, at which participants shared their experience in applying the practices, and also produced a 7-minute

							video about FOG management, for use in education of commercial establishments. Out of 22 establishments that participated in the original workshop, 14 decreased their amount of FOG generation more than 50%.
2.2.04	Conduct training for small businesses in the Reynosa area on best practices related to discharges of fats, oils, and grease (will include before and after measures).	Municipio of Reynosa	$16,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798, ecologiareynosa@hotmail.com	Organize a workshop or training event(s).	The project was canceled.
2.2.05	Implement a public campaign to increase awareness of problems of non-point-source pollution in the Lower Rio Grande Valley of Texas, through signs posted on roadways and at public facilities, messages on a school district television station, presentations at numerous public events and meetings, and newsletters of various organizations.	Fifteen cities in the Lower Rio Grande Valley (LRGV) that are members of the Texas Pollution Discharge Elimination System Stormwater Task Force, Texas A&M Kingsville, school districts, and NGOs	$40,000	EPA border grant through the BECC	Javier Guerrero (Lower Rio Grande Valley TPDES Stormwater Task Force, Texas A&M University-Kingsville), 956- 457-3023 jguer0351@aol.com	Complete the project by the end of 2013.	Workshops were coordinated with the Cities of Harlingen, San Benito, La Feria, Palm Valley, Primera, Weslaco, Donna, Alamo, San Juan, La Joya, Edinburg, Palmview, and Mission. A total of 104 signs were installed by those cities at various locations, and those locations were GPS'd.
2.2.07 (Sub-obj. 2b)	Install new or upgrade selected existing sewer lines and connect them to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges through the stormwater system to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank (NADB)	Claudia López Aguilar (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) claudialopez@comapanuevolaredo.gob.mx	Complete the project by summer 2013.	BECC certified the project in September 2012, and all work is expected to be completed by January 2015. The objective was to address five sewer collection lines, all with upgrades. Of the five, one of them was been completed by mid-2014 and connected to the

							wastewater treatment system. The remaining four collectors were under repair and still discharging about 1.6 MGD to the stormwater system. Another discharge point from La Joya Creek was identified by COMAPA and will be repaired after an agreement is signed with a private property owner where it is located.
2.2.08 (sub-obj. 2c)	Hold workshops on energy efficiency for water utilities and perform energy audits of the utilities in five municipios in Tamaulipas—Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	BECC and the water utilities in Nuevo Laredo, Reynosa, Rio Bravo, Cd. Victoria, and Matamoros	$250,000	EPA and BECC	Abdias Moreno (BECC), amoreno@cocef,org	Complete the project by 2014.	The project was completed. Workshops were held in 2013, and then final energy audits were presented at a meeting in Matamoros in early July 2014. The audits recommended retrofits requiring a total investment of $3.7 million, with average payback times of one-two years.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	Develop and produce region-specific supplemental materials necessary to produce a *Waters to the Sea*- Rio Grande module. (*Place-based education with comprehensive watershed focus).*	Center for Global Environmental Education (CGEE)- Hamline University, Harte Research Institute @ Texas A&M-Corpus Christi, EPA, WEAT, and AWWA	Approx $100,000 in 2013 $ 50,000 in 2014	Various funding possibilities will be explored	CGEE- Tracy Fredin Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Recruit and establish an advisory board, produce videos and other materials, identify one or two ISDs to pilot program, and conduct training for at least 25 teachers in 2014.	The project was cancelled.

2.3.03	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas, which are tributaries to the Rio Grande.	SEMA (State of Coahuila), Municipio de Piedras Negras and Municipio de Acuña	$400,000	Coahuila will fund first part and will be seeking funding for the rest	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Begin implementing the campaigns and conclude land conservation agreements by the end of 2014.	SEMA obtained EPA funding through the BECC in spring 2014 to restore and conserve the Arroyo Las Vacas. SEMA has developed partnerships with TCEQ, Ciudad Acuña, local academic institutions, and UT Austin. SEMA and BECC finalized the workplan and are negotiating the quality assurance project plan. In October 2014 in Cd. Acuña SEMA held a ribbon cutting for the Arroyo Las Vacas project and a complementary signing ceremony regarding land conservation. Several entities are collaborating on the development of a similar project for the San Rodrigo river. The projects will promote public awareness and take actions to improve the ecosystems of the arroyo and the river.
2.3.04	Implement a program to remove invasive plants in the Rio Grande.	SEMA (State of Coahuila), CONANP, Profauna	$85,000	SEMA (Coahuila), CONANP, Profauna – and will seek other funding sources	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sema.gob.mx	By the end of 2014, increase the activities of the invasive species plant removal program in the Rio Grande on the border of Coahuila.	No progress yet had been made by mid-2013. No information has been available since then.

2.3.05	Organize a regional workshop to disseminate "best practices" related to water conservation policy, programs (such as EPA's Water Sense), and public education, and implement enhanced programs in at least one pair of sister cities.	City of Laredo, EPA, TCEQ, TX Water Development Board, Piedras Negras Technological Institute	$6,000	City of Laredo, EPA, TCEQ, and local sponsors	Miguel A. Pescador mpescador@ci.laredo.tx.us Debora Browning EPA, Region 6 browning.debora@epa.gov	Hold a regional workshop in Laredo by spring 2013, and implement a new campaign in two sister cities by 2014. Enlist 10 new WaterSense Partners.	A day-long workshop was organized and hosted by Laredo in March 2013. More than 100 persons attended from both sides of the border, including Texas and Tamaulipas state agencies, and discussed conservation strategies. No new WaterSense Partners had been added by mid-2014 as a result of the workshop.
2.3.06 (Sub-Obj. 3a)	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CILA, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly.holligan@tceq.texas.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Terms of reference were developed that serve as the framework used by participating entities in the collaboration. In February and July 2013, TCEQ hosted training sessions on water quality modeling software (QUAL-TX and LAQUAL) for Mexican agency and EPA staff. In July 2014 TCEQ began taking water samples in the target stretch of the Rio Grande for analysis. Mexican partners have not yet set a date for their sampling.

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila	Unknown	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarnat.tamaulipas.gob.mx Lic. Alejandro Manriquez Ramirez (SEMARNAT/Coahuila), educacion@coahuila.semarnat.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013. Hold an information exchange meeting w/Texas 2014	SEMARNAT implemented the program very successfully in Tamaulipas and on a very limited basis in Coahuila. No information is available from Nuevo León. By mid-2013 in Tamaulipas, 135 schools had been registered in the program—33 in Nuevo Laredo, 50 in Reynosa, and nine in Matamoros. SEMARNAT Coahuila has certified one school in Cd. Acuña for the program.
3.1.02	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers, and workshops at schools.	Cameron County and the Valley Proud Environmental Council	$10,000	Lower Rio Grande Valley Development Council, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the project by the end of 2013.	Cameron County and the Valley Proud Environmental Council engaged in a media campaign against illegal dumping, using billboards and newspapers throughout the Lower Rio Grande Valley. The two entities received numerous phone calls during the campaign,

ED_002319B_00013888-00017

							expressing concern about the trash that they had seen dumped throughout the valley.
3.1.03	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions.	The Cities of Pharr, Mission, McAllen, and Mercedes, and the Town of Bayview	$160,000	Lower Rio Grande Valley Development Council, TCEQ, and individual local government	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org (956) 682-3481	Finish the five separate but related projects by the end of 2013.	All cities except one completed their projects (Bayview cancelled its activity). The cities expanded and enhanced their recycling capabilities at their recycling centers by purchasing mobile recycling trailers, forklifts, and other equipment. Also, Pharr has introduced Curby the recycling robot in outreach activities.
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio of Nuevo Laredo		The City of Laredo Environmental Services local partners, and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), lnava1@ci.laredo.tx.us	Establish an organization in 2013 in Nuevo Laredo and affiliate with Keep America by the end of 2014.	The project's objectives are expected to be fully completed in early 2015. Reciclado en Acción/Fundación Verde was established in 2013, and initiated environmental awareness events in Nuevo Laredo. The City of Laredo Environmental Services will be covering the membership fees (about $6,000) for the organization to be affiliated with Keep America Beautiful.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public bins in parks, to include all elementary	Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program)	Install the bins at all elementary schools in 2013 and start relevant	The project was completed. Bins were installed in elementary schools and

	schools in Nuevo Laredo.				valencia_osvaldo@hotmail.com	environmental education programs for students.	environmental education conferences were resumed at the schools in February 2013.
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dr. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	This project was re-numbered and is now #6.0.07
3.1.09	Redesign and extend coverage of the *E-Conexion* newsletter as a strategy to share best practices.	SEDUMA (State of Tamaulipas)	$ 30,000	SEDUMA	Dra. Silvia Casas (SEDUMA), silviacasas757@gmail.com	Extend the dissemination of *E-Conexion* to 100% of the Tamaulipas municipalities.	SEDUMA expanded the electronic distribution to include 43 municipalities, all their state offices, environmentally certified schools (SIMA-E), and private industry. To save paper and ink, SEDUMA no longer prints and distributes hard copies. Minor changes were made to the design and the use of background colors is minimized.
3.1.10	Organize a visit to Austin, TX by private and public sector Mexican waste management specialists to see a model sanitary landfill and municipal recycling operation	Red Ambiental (headquartered in Monterrey, Nuevo León) Secretariat for Sustainable Development (State of Nuevo León), and the TCEQ (State of Texas)	Unknown	Red Ambiental	Eddie Moderow (TCEQ), eddie.moderow@tceq.texas.gov	Organize the visit for October 2014.	The project was completed. The visiting group included fourteen public- and private-sector officials from six Mexican states. They spent two days in Austin in October, talking with Austin City officials and TCEQ staff, and visiting the Texas Disposal Systems landfill in Creedmore and the

							Balcones Resources' recycling facility in Austin.
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat (State of Nuevo León), and TCEQ (State of Texas)	$35,000	EPA border grant through the BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com	Survey border municipalities on both sides of the border, prepare a "best practices" manual, and perhaps hold a regional workshop	The project was completed in 2013. SDS surveyed more than 20 local governments on both sides of the border and then developed a manual for local governments on best practices for scrap-tire management. With this manual as the focus, SDS collaborated with the TCEQ to organize a binational workshop held in March 2013. Representatives of 10 local governments plus state and federal governments, as well as private industry, attended the workshop.
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	SDS (Nuevo León), SEMARNAT, and Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo, Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	This particular project has been cancelled and replaced by a related but different project in the same municipio. See project # 3.2.08 below.
3.2.03	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, Texas.	Texas A&M University – Kingsville (TAMUK)	$15,000	EPA border grant through the BECC	Dr. Kim Jones kfkdj00@tamuk.edu	Through a demonstration project, assist communities in building capacity for scrap-tire	With the grant funds available, TAMUK managed a demonstration project that baled

						management.	approximately 62,500 scrap tires (625 bales) and used 125 of the bales as part of the sub-base of a section of a landfill road bed in Brownsville. TAMUK is looking for an additional $15-20K to use the remaining 500 bales and complete the extension of the road.
3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Significant progress was made. By mid-2013 compost was being generated by COMAPA and applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center. The utility subsequently began distributing compost to schools for landscaping and gardening and also uses it at COMAPA facilities. COMAPA uses 5 to 10% of all the bio solids generated at the wastewater treatment plant for the compost. In 2015 the utility expects to sign an agreement with the municipio to purchase equipment that will enable generation of more compost, and

							then begin selling it to commercial establishments and businesses.
3.2.05	Implement a collection and management program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	The program will be in full operation by spring 2013.	The program was in full operation in 2013, after the first steps had been taken in August 2012. In 2013, the city collected about 27.7 tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap-tire management program that includes valuation.	SEDUMA (Tamaulipas)	$ 400,000	SEDUMA/SEMARNAT/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Develop public policy and a management plan for scrap tires	The project is on hold.
3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA (Tamaulipas)	$ 300,000	SEDUMA/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Complete action plan	The project is on hold.
3.2.08	Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León.	SDS (Nuevo León) and Municipio of Sabinas Hidalgo, Nuevo León	$25,156	BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	Complete the study by 2015.	[This project is a replacement for project # 3.2.02, and was not initiated until mid-2014.] By the end of 2014, the study was 35% completed.

Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	Complete the remediation of old oxidation lagoons in Piedras Negras.	Municipio de Piedras Negras and SEMA (State of Coahuila)	$300,000	SEMA	Maria Teresa Molina, Municipio de Pledras Negras, teduada@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. Piedras Negras has not responded to inquiries about the project

						extension to and a green area at the site.	during 2013 and 2014.
3.3.02	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass.	City of Eagle Pass	$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.us	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Remediation of a portion of the site was carried out prior to 2010. The city will seek assistance through the TCEQ's Brownfields Site Assessments Program to determine whether the site meets the federal definition of a brownfields site and is eligible for funding under the EPA's brownfields program.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA (State of Coahuila), Municipio de Piedras Negras	$400,000	SEMA	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	By mid-2013, SEMA determined they needed to perform a feasibility study on using coal pits as disposal sites for scrap tires. No information has been available since then.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	Develop an emergency response plan for the maquiladoras in Brecha E-99 in Reynosa,Tamaulipas.	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park	$10,000	EPA border grant through the BECC	Dr. Emilio Sonderegger Arriola emilio.sonderegger@landisgyr.com		The project was canceled.

		Mutual Aid Committee)					
4.2.02	Hold a second "knowledge exchange" on risk mapping for first responders on both sides of the Lower Rio Grande Valley in Texas-Tamaulipas, for the purpose of identifying and gaining access to existing sources of data on hazmat storage and determining additional needs.	Fire departments from Texas and Mexican municipalities in the Gulf Task Force area, EPA, TCEQ, and Civil Protección for both Tamaulipas and Mexico	Unknown	EPA and NORTHCOM	Paige Delgado (EPA), Delgado.paige@epa.gov EPA Region 6	Hold the exchange during the first half of 2013	A first exchange was held in July 2012. The project is on hold because of the uncertainty of funding from NORTHCOM.
4.2.03	Hold a binational chemical-spill exercise at the World Trade Bridge between Nuevo Laredo, Tamaulipas and Laredo, Texas.	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	$5,000	EPA border grant through the BECC	Lic. Juan Ernesto Rivera Gómez (Civil Protección de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com or ernestorivera5775@hotmail.com	Hold the exercise after the U.S. and Mexican governments have approved permits that allow hazardous waste to be transported on this bridge.	The project is in progress. The U.S. Department of State issued a "presidential permit" in May 2014 to allow the crossing of hazardous materials. The Mexican government is awaiting the completion of a water quality study on the Rio Grande that CONAGUA required before the permit is issued. If and when a Mexican permit is issued and both nations sign diplomatic notes, local officials will organize a binational exercise.
4.2.04	Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	$5,000 - will be looking for funders	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho (Protección Civil de Nuevo León). jorge.camacho@nueveoleon.gob.mx	Add the Solidarity Bridge, which is upstream from Laredo and Nuevo Laredo, to the Joint Contingency Plan for Laredo and Nuevo Laredo by the end of 2013.	See the following project (4.2.05).

	currently directed to this bridge.						
4.2.05	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department), evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com	Hold new meetings of the staff of the two cities in 2013 in order to re-visit the language of the draft revision and possibly develop alternative language.	The project is on hold. Laredo officials met in May 2013 to make changes to one sentence in a draft of the new cross-border contingency plan that had been originally prepared in 2009. The changes were intended to clarify that Laredo could not send personnel across the border, because of security and liability concerns, but could assist in other ways. The revised agreement was been approved subsequently by Nuevo Laredo, but has been awaiting action by the Laredo City Council since that time.
4.2.06	Update and improve the cross-border contingency plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b) Del Rio, Texas and Ciudad Acuna, Coahuila, which will include risk analysis and development of risk maps.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de Ciudad Acuña, BECC, and Consultoria y Servicios en Seguridad Industrial y Medio Ambiente S.A. de C.V	$130,000	EPA border grant through the BECC	Briselda Duarte (Border Environment Cooperation Commission), bduarte@cocef.org and M.C. Mónica de Jesús Pérez Morales (Consultoría y Servicios en Seguridad Industrial y Medio Ambiente, S.A. de C.V.)	Complete new plans by the end of 2013.	Begun in 2012, the project was completed by the end of 2013. Under contract from the BECC, two workshops were organized in the first half of 2012 for staff from the two pairs of sister cities to discuss protocols and risks. After delays and the hiring of a new contractor, additional workshops were held in

							July 2013. In November of that year, the two sister-city pairs each signed a Memorandum of Cooperation for new cross-border contingency plans. Each community committed to providing resources and mutual aid in case of chemical accidents.

Multi-Goal Projects

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Points of Contact	2013-2014 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	Organize educational campaigns featuring training sessions for health professionals, health students, and promotoras followed by community outreach in the Laredo and Harlingen areas in Texas, addressing how to reduce pre-natal and childhood exposure to pesticides, lead, solvents, second-hand tobacco, and diesel exhaust.	The University of Texas Health Science Center in San Antonio	$50,000	EPA border grant through the BECC	Claudia Miller, M.D., MillerCS@uthscsa.edu or steer@uthscsa.edu	Complete the project by the end of 2013.	The project was fully implemented in 2013. Two training sessions were held for 40 promotoras (lay healthcare workers)—20 from in the N. Laredo/ Laredo area and 20 from the Cameron County and adjoining municipios in Tamaulipas. The classes covered 17 types of potentially hazardous exposures during pregnancy and childhood, and how to avoid these exposures. Subsequent to the training, the promotoras provided

							outreach to 400 pregnant women or mothers with young children in a three-month period. Each of those families made an oral commitment to discuss lessons learned with two other families.
6.0.02	Conduct educational workshops/plays on the safe handling and disposal of pesticides for farm workers in the Lower Rio Grande Valley of Texas and in the Laredo area.	Migrants in Action – Weslaco, Texas	$20,000	EPA border grant through the BECC	Noemi Ochoa (Association of Farmworker Opportunity Programs), nochoa@yahoo.com	Produce the EPA-written play "El Moscas y los Pesticidas" using students in two cities in the first half of 2013	The project was completed in 2013-- Student groups in Laredo and Edinburg performed the play before more than 2,000 people.
6.0.03	Develop of a binational repository of databases on environmental stresses and public health effects.	Texas A&M Health Science Center, School of Rural Public Health, PAHO, BECC, HIDA-REY COBINA, Hidalgo County Health Dept.	$50,000	EPA border grant through the BECC	Genny Carrillo (Texas A&M Health Science Center, School of Rural Public Health), gcarrillo@srph.tamhsc.edu	Review the literature, build a cross-border partnership of professionals at the local, state, and national levels, identify health hazards in the environment and relevant indicators, and build a binational repository of databases by the end of 2013.	Project staff accomplished as much as possible during the grant period, but encountered unanticipated difficulties with selected objectives. The project reviewed literature, and talked with health professionals on the U.S. side, and established a repository of U.S. databases. The project made contact with professionals in Mexico but had difficulty finding relevant databases on that side of the border that were not outdated. The project also discovered that the Mexican professionals

							use different parameters than are used in the United States.
6.0.04	Address children's environmental health issues in Laredo, Texas and Webb County by surveying a sample of homes and identifying health risks, tracking reported exposures through selected hospitals and clinics, developing and implementing a public outreach campaign regarding the identified risks, and identifying and publicizing two relevant online courses available for physicians.	Laredo Health Department	$50,000	EPA border grant through the BECC	Waldo Lopez (City of Laredo Health Department) wlopez@ci.laredo.tx.us	Complete the project by the end of 2013.	Laredo completed the project by the end of 2013. Project staff surveyed the use of pesticides and household hazardous materials in more than 135 homes. More than 50 physicians and health providers were trained on diagnosing illnesses related to pesticide exposure through the use of a web-based diagnostic tool, allowing them to assist survey respondents with symptoms related to pesticide exposure. Staff distributed publications on lead and pesticides to over 120 homes.
6.0.05	Organize annual Environmental Summits for the public in the Lower Rio Grande Valley, in cooperation with State Representative Eddie Lucio III's office.	TCEQ, and cities in the Lower Rio Grande Valley	$15,000	Local sponsors , EPA	Imelda Pena, TCEQ Imelda.pena@tceq.texas.gov	Hold Environmental Summits in the fall of 2013 and in the fall of 2014.	The fourth annual Valley Environmental Summit was held in October 2013. An estimated 300 people attended. Their priority interests were illegal dumping, marine debris, and community cleanup programs. The fifth summit was held in October 2014 with approximately 350

							attendees. The topics of interest were sustainability, local enforcement programs and household hazardous waste programs.
6.0.06	Organize annual Environmental Summits for the public in Webb County, in cooperation with State Senator Judith Zaffirini's office.	TCEQ and the City of Laredo	$15,000	Local sponsors , EPA	Carmen Ramirez, TCEQ , carmen.ramirez@tceq.texas.gov	Hold Environmental Summits in the fall of 2013 and 2014.	Environmental Summits were held in Laredo in October 2013 and November 2014. These were the fourth and fifth in an annual series. The 2013 Summit had more than 400 attendees. Speakers discussed recycling, energy efficiency, and water conservation. The 2014 Summit had a theme of "Focus on Nature" and targetted high school students, who comprised a majority of the 325 attendees. Topics included weather preparedness and energy efficiency. There were also hands-on activities on building a natural habitat and sampling water quality parameters.
6.0.07 (formerly 3.1.08)	Extend Tamaulipas' state program in promoting environmental management systems (SIMA) to more schools and government offices.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dra. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	SEDUMA made significant progress in expanding the use of its guidelines for environmental management

							programs. SIMA's educational division enrolled more than 90 schools in Matamoros, Tampico, and Victoria. Each school held workshops on water, waste, and energy efficiency, reaching a total of 26,000 students. The schools also received equipment such as low-flow water toilets, recycling containers, and energy-efficient light bulbs. SIMA's institutional division trained more than 1,800 state employees in water conservation, energy efficiency, and recycling. State offices received water filters and energy-efficient light bulbs and reduced energy costs 13.03% from January to August 2014. Tamaulipas will expand both programs to more schools and state offices in 2015.

GOAL 1. - Reduce Air Pollution

Objective 1. - Reduce the number of vehicles circulating in the border region that do not comply with emissions standards;

Type of project. - Strengthen border city vehicle emissions inspection programs (VEIP) partnering with State's VEIP by an effective enforcement of Mexico's environmental regulation on vehicle importation joining forces to achieve program's target of vehicles going through inspection test aimed toward reaching 100% of vehicle fleet.

Expected output / outcome. - In accordance with 24 actions reached at the conclusion of the border -wide workshop on vehicle emission inspection held in Tijuana, Baja California on November 13 & 14, 2014 toward establishing an harmonized inspection tests at Ports of Entry (POE) where used vehicles are imported to Mexico an attribute that corresponds to PROFEPA's inspectors, by reaching an agreement with each of the 6 northern border states environmental secretary delegating to either the State VEIP or with border cities' VEIPs; At cities where a VEIP program is to be implemented or has recently started an outcome shall include building technical capacity with Auto-mechanics and Emission Inspectors centers being trained, establishing appropriate ordinance or Reglamento as its referred in Mexico's Governance

1) A.- In Ciudad Juarez, Chihuahua obtain an increment of at least 10% of vehicles passing through the Juarez's VEIP in existence since 1993, compared to an absolute value of vehicles that went through inspection centers the previous year; having a milestone of attaining near 100% compliance in subsequent years; B.- throughout 2015 set up in Santa Teresa, NM – Jeronimo Port of Entry (POE) a VEI unit to carry out Mexico's Environmental regulation on vehicle importation and enforce compliance to 100% of vehicles being imported to Mexico,

2) A.- In Ciudad Acuña establish a VEIP supported by a State-wide VEIP set up by the State of Coahuila Environment Secretariat (SME,) leveraging with successes of historical VEIP that has gained expertise of more than 22 years of existence in Ciudad Juarez and State of Baja California's recently enacted VEIP; B.- Put into operation a VEIP where used vehicles imported at Texas POEs include partnering between local VEIP and Mexico's federal enforcement PROFEPA – SEMARNAT aimed toward achieving 100% of compliance;

Objective 2.- By Year 2020 reduce pollutant emissions aimed toward maintaining attainment and compliance in the El Paso, TX–Dona Ana County, NM and at State of Chihuahua's border cities air sheds, of respective National Ambient Air Quality Standards (NAAQS) or Norms as they are referred in Mexico,

Type of project. - Join forces with collaborative work between SEMARNAT Atmosphere (DGGCAyRETC) offices, State of Chihuahua Urban Development and Ecology Secretariat (SDUE) with border cities' Ecology departments supported by US – Mexico Air Quality Forum committee members such as the JAC – CCC;

Expected output / outcome. - PROAIRE is Mexico's air shed management plan containing various comprehensive sections compared to the USCAA State Implementation Plans (SIPs.) The PROAIRE team should produce social, political, geographic, and demographic information, along with a section that details the air shed air quality monitoring station's network, Emissions Inventory, current ambient air quality standards (Norms) for criteria pollutants, its health related risks of exposure and impacts, and an environmental education / outreach component , supported with well-defined measurable emissions reduction strategies, complemented with identified potential sources of funding and schedule for carrying out those measures included in the PROAIRE; Through 2015 and first half of 2016, produce a 2020 PROAIRE that would substitute the previous Ciudad Juarez's 2012 PROAIRE, taking into account that Mexico recently enacted new ambient air pollutants standards; The PROAIRE 2020 will have an opportunity to include a list of policy measures that were recently presented within the State Of Chihuahua Phase 1 Climate Action Plan, specifically those that shall bring co-benefits in reducing ambient air quality pollutants while protecting public health,

Objective 3. - Maintain effective Ambient Air Quality Monitoring Network (AAQMN) and timely access to air quality data produced at NM/TX /MX air sheds.

Project Type. - The El Paso, TX – Ciudad Juarez air quality monitoring network in existence for 23 years has not been working out due to inconsistent continuity of Juarez's air quality stations which has been out of order, added to the fact that as of August 2014, the City of El Paso Environmental Services' Air Quality monitoring program stopped requesting USEPA's funding for Juarez's consumables, parts and other QA/QC expenses.

Expected output / outcome. – Utilizing the assessment from the 2014-2014 action plan for the El Paso, TX – Dona Ana, County NM – Ciudad Juarez (PDN) AAQMN, outline all possibilities on hand or creatively foreseen mechanisms that would assure financial support for Ciudad Juarez's AAQMN operation expenses, along with funds that would cover cost for laboratory analysis, data validation, QA/QC, consumables, parts and data publication and outreach. Project should include alternative mechanisms for systematic - continuous source of funding that would assure sustainable AQQMN operation and public data outreach / information on existing National and local air quality information systems (SINAICA in Mexico and Leads, Zia and Index in TX, NM and EPA's)

GOAL 2: Water – Improve Access to Clean and Safe Water

1) Provide workshops on proper decommissioning of septic tanks, water conservation and pollution prevention in order to better understand, plan and maintain cleanup sources of drinking water on future groundwater supplies in New Mexico-Texas-Chihuahua border, specifically in Dona Ana County, New Mexico (specifically the communities along the corridor between El Paso, Texas and Las Cruces, New Mexico) and Luna County, New Mexico and East El Paso County, Texas.

Expected Outcomes: Working with state or local agencies, identify the communities using septic tanks. Conduct outreach to residents through community workshops, to ensure that residents who are utilizing a septic tank are properly maintaining and if applicable, decommission their septic tanks. An inventory of septic tanks, clearly identified in a GIS system or other tracking system for that community, should be developed in order to continue to track septic tank users. Check Dr Brown's report to see if it covers this area

Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.

1) Conduct a water audit on small water drinking systems (serves less than a population of 5,000 users) to identify ways to improve efficiency and provide cost-savings measures for that the system.

   Expected Outcome: The water audit should at a minimum address but not limited to: gather basic system information, determine flows into and out of the distribution system based on estimates or metering, calculate the performance indicators, assess where the water losses appear to be occurring based on available metering and estimates, analyze data gaps, consider options and making economic and benefit comparisons of potential actions and recommend the appropriate interventions needed to improve performance for the system.

2) Outreach and education to improve water quality within the Gulf Task Force Region.

   Expected Outcome: Outreach and education to the community on the topic(s): Fats, Oil & Grease Management; Beach Clean-ups and/or Illegal dumping in watersheds.
   Expected Outcome: Outreach and education with community officials or water districts on Storm water regulations and Industrial Pretreatment (40 CFR403 and NOM 001-002). Education workshops should measure an increase in participants' knowledge on the subject through some sort of measuring tool.

Objective 3: Work bi-nationally to identify and reduce surface water contamination in Trans - boundary water bodies and watersheds.

Objective 3a: Develop a binational watershed protection plan in the Lower Rio Grande below Falcon International Dam. Initial activities could include partnership building, watershed characterization, definition of goals/identification of solutions, determination of waste load, load allocations for each country, and development of an implementation plan.

Continue to support activities that meet objective 3a– The proposals should address any water quality sampling and collection, data analysis, modeling and surveys still required by the bi-national workgroup on this project. In addition, the work should support any additional training or workshops as well. NEED input from Gilbert or Water Staff on this project. They are putting

together language for the RFP once they have consulted with state and other federal partners. Expect language early next week.

Project Type.- Develop applications and educational outreach efforts for water reuse and water conservation projects.

Expected outcome: Demonstrate water reduction or conservation anywhere in a water system (i.e from the homeowner or end user up to the water utility level). Educational projects can include from doing public education on rainwater harvesting or any other water reuse technique.

Goal 3: PROMOTE MATERIALS AND WASTE MANAGEMENT, AND CLEAN SITES

Waste management programs and services have not kept pace with border communities' needs and the current waste management structure is not adequate to meet these increasing needs. It is necessary to collaborate at all levels to ensure that limited resources are applied in a way that limits additional threats of land contamination and prevents adding to legacy land contamination in the region. It is necessary to expand knowledge and experience on how to apply a material life cycle approach to existing international policies to implement sustainable materials management programs especially E-waste, used cars, household appliances, tires and improve infrastructure and services to manage discarded materials;

Objective 1: By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.

Type of project.- Build capacity and improve infrastructure to establish strategies to minimize waste, maximize collections systems, support secondary materials markets, and reduce overall disposal in landfills and open dumps;

a. Develop comprehensive plans for hazardous and solid waste management, and look for economic/productive reuse where possible, including: sludge from wastewater treatment plants; household hazardous waste; used electronics; agricultural pesticides; food scraps, process chemicals from oil and gas exploration, and medical waste,
b. Expand environmental education on waste management issues and food recovery programs.
c. Close and remediate open dumps - prioritizing where required by regulation
d. Continue to develop sustainable scrap tire management programs to include infrastructure of scrap tire management to increase recycling or material reuse.
e. Curb illegal dumping of tires, demolition/construction debris, and other waste streams
f. Continue to expand municipal recycling program
g. Assist rural communities to build capacity for waste streams (i.e. used oil, household hazardous, electronics, tires, etc.) and assist these communities in implementing recycling, household hazardous waste and electronic waste collection programs. In addition, develop scrap tire management and disposal plans for long term solutions of the

regional scrap tire problem in rural communities which addresses recycling/re-use. Project should include an educational component on sustainable materials management and address infrastructure and collection of recyclables and special wastes (household hazardous, food scraps, tires, demolition debris) etc

Expected Outputs/Outcomes: The projects should be aligned with municipal or state priorities and demonstrate measurable quantities of special waste reduced, reused, or recycled as well as define cleanup activities and demonstrate increased collection or alternative disposal option provided to residents/industries. Project should demonstrate increase the number of citizens that receive both solid waste disposal and recycling service. Project should include an educational campaign.

Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.

a. Identify priority waste streams in ten municipalities in Coahuila and develop a sustainable waste management programs for those municipalities to include strengthening the market value of the waste.
b. Develop sustainable management practices to address used electronics, household hazardous waste, and tires in the Amistad Task Force Region to include an educational component to promote recycling and solid waste practices.

Expected Outputs/Outcomes: The projects should be aligned with municipal or state priorities and demonstrate measurable quantities of special waste reduced, reused, or recycled as well as define cleanup activities and demonstrate increased collection or alternative disposal option provided to residents/industries. Project should demonstrate increase the number of citizens that receive both solid waste disposal and recycling service. Project should include an education campaign to maintain the recovery and reduce of such waste.

GOAL 4: EMERGENCY RESPONSE

Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building

1) Conduct bi-national training to both U.S. and Mexican local emergency responders, on incidents involving Chemical, Biological, Radiological, Nuclear, or Explosive (CBRNE), and/or all hazards response skills enabling them to respond safely and effectively to these types of incidences.
Expected outcome: The proposal should include a letter of support from both U.S. and Mexican sister-cities and tribes involved. Proposals should document close coordination with local agencies. Training topics should include at least two of the previously identified CBRNE topics. Training topics should also be identified as priorities for the local agencies. Generally, the course should present information regarding immediate response actions associated with life safety, preservation of property, and restoration of an incident site, as well as information related to the identification of hazards.

Below are examples of critical skills sets that may be included in the training:

- Identify potential targets for a CBRNE attack.
- Describe the wide-ranging implications of biological agents when used as weapons.
- Describe the threats associated with chemical weapons and the proper response to a chemical hazard incident.
- Identify radiological sources and hazards.
- Operate various chemical, biological, radiological, and nuclear dissemination devices.
- Evaluate a hazardous area using various monitoring and sampling tools.
- Perform mass casualty triage and evacuation operations at a CBRNE/all-hazards mass casualty incident.
- Perform mass casualty decontamination operations in response to a CBRNE incident.
- Initiate preliminary stages for implementation of the Incident Command System by emergency responders.

2) Conduct bi-national training to U.S. and Mexican local emergency responders, specifically on HAZMAT incidences only.

Expected outcomes: the proposal should include agreements signed by officials of the sister-cities or tribes that benefit from this course. The training should include specific HAZMAT topics that the locals have identified as a priority. Proposals that are of a train-the-trainer HAZMAT course will be given higher preference to those that are not train-the-trainer model course.

3) Conduct bi-national: 1) tabletop drill with functional drill/exercise or 2) Full Scale Drill / Exercises to test local sister city plans. In order to meet the definition of bi-national, the drills/exercises should go beyond a simple notification to the local sister-city pair and demonstrate actual coordination of resources (expertise, equipment, personnel, etc.) between the sister-cities.

Expected Outcome: The proposal should include a letter of support from both the U.S. and Mexican sister-city pair or tribe selected and should coordinate with not just the local fire departments but other relevant stakeholders (i.e. Customs and Border Protection, Medical Institutions/Hospitals, Law Enforcement, local businesses, schools or other local, state or federal entities located within that region). The type of HAZMAT incident selected should be identified by the locals as a priority for that region. As with any emergency response drill/exercise conducted, bi-national pre-meetings and post-meetings are expected, including a final after-action report with specific recommendations on how to improve the local sister-city plan and what additional training is recommended.

4) Develop a hazardous materials risk analysis.

Expected Outcome: The risk analysis should identify facilities within the region that store or transport hazardous materials, including the type of materials and quantity. The risk analysis developed should be a geographic information system (GIS) analysis that is able to be accessed by both US and Mexican responders. If there is sensitive information that is included, then the system should be secured and only authorized US and Mexican representatives should be given access to the information. The risk analysis should address, at a minimum, mitigation measures to risks identified, as well as gaps and needs. The analysis should not only include information from existing government databases and reports, but also input or coordination with other local stakeholders such as industry, etc.

GOAL 5. - COMPLIANCE ASSURANCE AND ENVIRONMENTAL STEWARDSHIP

Objective 4. - By 2020 implement at least 5 binational workshops targeted to environmental enforcement and at DHS-CBP Port of Entry (POEs) professionals.

Type of Project. - Exercise exchange of information to improve understanding each Country's respective compliance and enforcement programs and tools including field inspections and case development practices.

Expected output / outcome. – A thorough curriculum covering US and Mexico's laws and regulations carried out over a two day workshop, training federal environmental enforcement and POE customs personnel, extending participation of custom brokers, freight and shippers staff from companies involved in cross border movement of hazardous chemicals accordingly to the type of goods transported in the Ysleta – Zaragoza POE and or at other major POE such as Laredo – Nuevo Laredo POE. Focus on improving enforcement by strengthening federal agency's coordination in both sides of the border with custom brokers, truckers and shippers, focusing on legal framework and case development, harmonizing knowledge on enforcement through better case development and intelligence – led enforcement tools. The two day workshop will be directed to approximately 50 attendees.

FUNDAMENTAL STRATEGY

Promoting Environmental Health.-

Type of project. - In 2014, the Environmental Protection Agency and Border Health Commission signed a Collaborative Agreement to work on strengthening the link between the environment and public health. In addition, the Border 2020 framework calls for capacity building through environmental and education training to serve as a tool to increase engagement and participation by the community and stakeholders to better manage the complex environment and public health issues along the border.

Expected Outputs/Outcomes: The proposals submitted under this fundamental strategy should focus on developing certified environmental health curriculum that can be utilized by border community health workers or "promotoras".

The curriculum should focus in one or several area(s): lead, mercury, pesticides, and other heavy metals in the environment, air quality, water quality, waste or climate change as any of these relate to the environmental health impact they have on people, especially children. The curriculum should be such that it can be replicated in other areas along the U.S.-Mexico Border. In addition, "promotoras" who receive this training also receive certified continuing education credits in either New Mexico or Texas or both states. The curriculum should empower promotoras and ultimately the community with a clear and concise message on the impact the environment has on health and protective measures that can be taken. Last, the curriculum developed should work with "promotoras" on both the U.S and Mexico.

Project Id	Project Name
20240	Communities United in Prevention of Environmental Pollution
20241	Characterization of drayage activities and emissions in Laredo-Nuevo Laredo airshed
20243	Keeping Pharr Beautiful...Starts at Home
20245	Conservation Arroyo Las Vacas in Acuña, Coahuila, Mexico.
20246	Waste generation Diagnostic in the Noresat border region
20247	Biosolids Recycling in Agriculture in the Valle de Juarez
20248	Urban Keyhole Gardens using Rain Water Harvesting Techniques
20249	Improving the Monitoring of PM10 in Ojinaga
20251	Planning Model for an Environmental and Health Texas/Mexico Border Information Exchange Program
20252	Promotora-Led Environmental Health Education for Children, Eagle Pass, Texas
20253	Management of Fat, Oil and Grease in Nuevo Laredo
20255	Alamo's recycling solid waste systems improvements through a holistic approach.
20256	Tire Amnesty Collection Events in El Paso County
20257	Scrap Tire Collection Program, City of Pharr
20258	Determining the Ideal Bioswale Porous Material for South Texas Stormwater Management

Printed On: February 2, 2016

20260	Sustaining the Environment at the New Mexico-Chihuahua Border
20261	Play: El Moscas Y Los Pesticidas.
20262	Ysleta del Sur Pueblo Community Collection Center
20270	Hazardous Materials First Resppnders Binational Training
20271	Hazardous Railcar Leak Mitigation El Paso_Juarez_Dona Ana Region
20283	Workshop on Energy Efficiency in Public Lighting Systems in Tamaulipas
20285	Comprehensive management project of solid waste in Rio Bravo and Valle Hermoso, Tamaulipas
20286	Comprehensive management of electronic waste project in Piedras Negras and Eagle Pass, Texas
20287	Binational Tabletop and Functional Exercises between the cities of Harlingen and Matamoros
20288	Environmental services in well-managed rangelands of the Chihuahuan Desert
20290	The Rio Grande/Río Bravo Water Quality Initiative

Printed On: February 2, 2016

20291	Fat, Oil and Grease (FOG) Public Outreach Campaign
20293	Law Reform and Environmental Education in Nuevo Laredo
20294	Clean in up program at City of Pharr, Texas
20295	Electronic Waste Management project in Ciudad Acuna, Piedras Negras and Guerrero in Coahuila
20297	Decision Making Tool (DMTG) for Stormwater in The lower Rio Grande Valley in Texas
20298	Sewage sludge and biosolids Agricultural Soils project in the Valle de Juarez
20302	Green Infrastructure in Public Space on Valle del Sol Avenue
20303	Vivienda sustentable y resiliente area poniente en Ciudad Juárez, Chihuahua
20304	Comprenhensive program to improve Air Quality basins in Northen State of Chihuahua

Printed On: February 2, 2016

Project Description	Goal	Status
The purpose of the project is to implement a training program related to proper maintenance of septic tanks in the communities of Montana Vista, Cuadrilla and Valle Bonito in El Paso County Texas	Goal 2	Concluded
A detailed characterization of the activity of the trucks in the region of Laredo-Nuevo Laredo, provide an understanding of the regional activity of the trucks and their implications for air quality, responsible for state and local transportation agencies border and air quality. With this information, decision makers and planners can develop strategies and policies that address the needs of transportation and air quality in the region as a binational regional level. The data, methodologies and information generated by the project could potentially be used to characterize the activities of trucks in other locations along the border.	Goal 1	Concluded
Increase outreach and awareness surrounding illegal dumping, also help the cities beautification efforts by increasing volunteer opportunities and encouraging the labors of community cleanup programs such as Operation Clean Sweep.	Goal 3	Concluded
This project involves the conservation and recovery of Arroyo Las Vacas, this being a tributary of the Rio Grande river which crosses the border city of Acuna.	Goal 2	Concluded
Implement a comprehensive management plan for the management of hazardous solid waste, special handling waste in medium-sized communities in the northeastern state of Nuevo León	Goal 3	Concluded
To determine the effect of biosolids in soils' physical and chemical properties, the plant's agronomic response and the economic return due to reduction in the use of chemical fertilizers and soil and environmental improvements	Goal 3	Concluded
Demonstrate that urban landscapes can incorporate small scale intensive growing beds to grow a variety of plants using rainfall and runoff and very minimal supplemental irrigation.	Goal 2	Concluded
The project is to provide training and training of technical personnel in the municipality of Ojinaga in the operation of the monitoring network of air quality particulate	Goal 1	Concluded
The overall goal of this project is to develop the framework for a system, including processes in phases and specific steps, required for the development of a bi-national environmental and health tracking system.	Goal 2	Concluded
The promotora (community health worker) model will be used for reaching out to parents and care givers, school teachers and child care providers with the aim of improving environments in and around the home, school and childcare facility.	Goal 4	Concluded
Disseminate to all generators of fats and oils as well as proper disposal retainer cleaning grease traps and the consequences that brings pour fats and oils down the drain.	Goal 3	Concluded
Increase the volume of collected recyclables, create environmental stewardships through education, create an identifiable solid waste mascot, and bring together all identifiable stakeholders to bring about holistic change within the community.	Goal 3	Concluded
Hold 4 tire collection Events en El Paso County. Print and Distribute a Flyer on "How To Report Illegal Dumping"	Goal 3	Concluded
The City of Pharr will implement a scrap tire collection event during their monthly Operation "Clean Sweep", community clean up event.	Goal 3	Concluded
To evaluate performance of parking lot bioswale by comparing its stormwater discharges and solids against those of conventional parking lot with no bioswale,to develop the best performing bioswale mixture from the materials tested in the prototype bioswales.	Goal 2	Concluded

Printed On: February 2, 2016

1) Provide three (3) educational presentations to the public, one each in the border cities of Las Cruces, Columbus and Deming; 2)Provide four (4) educational workshops to septic system owners in underserved areas of Luna County; 3)Provide two (2) Knowledge Exchange events for Luna County, one each in Deming and Columbus, on water conservation; 4)Initiate planning efforts for updating the 2002 Columbus/Ascensión/Palomas Sister City Cross Border Contingency Plan	Goal 1	Concluded
As part of the Workers Protection Standard(WPS), EPA Region 6 developed a humorous and educational script (in Spanish) named "El Moscas y Los Pesticidas", consisting of several characters showing how farm workers and their families can prevent exposures to pesticides	Goal 3	Concluded
the project consists in a community collection center that will receive electronic waste (e-waste), household hazardous waste (HHW), used tires and recyclable material.	Goal 3	Concluded
The project objective is to strength the response capacity providing proper training and equipment to hazmat first responders in the areas of McAllen-Mission-Pharr-Reynosa. More than 100 hazardous-material carrying trucks travel through the ports of entry in South Texas. The McAllen Fire Department staff in conjunction with the Mission and Pharr Fire Departments will join forces to work together to update the emergency notification related to hazmat emergencies.	Goal 4	Concluded
The project will enhance the region's capability to mitigate hazardous railcar leaks. The project will involve one day training event, each community will receive kits to provide train the trainer sessions.	Goal 4	Concluded
Train at least 30 public officials from 10 municipalities with basic tools to achieve greater energy efficiency and that this is reflected in a decrease in the emission of greenhouse gases into the atmosphere and in turn into economic savings for municipal utilities	Goal 1	Concluded
The project consists in conduct a Basic Diagnosis on the Comprehensive Management of Municipal Solid Waste in the municipalities of Rio Bravo and Valle Hermoso	Goal 2	Concluded
The project consists of a program of environmental education and health to join efforts in collecting electrical and electronic solid waste in the city of Piedras Negras, Coahuila e Eagle Pass in Texas.	Goal 3	To conclud in September 2017
The City of Harlingen Fire Department, proposes to advance on Goal 4, Objective 2 by the implementation of a hazmat training, a tabletop, and a functional exercise. Proposed Scenario consists of a tanker trailer roll-over accident carrying a petro product spilling into Mexico waterways. The City of Harlingen presnts a sister city agreement since 2014 to support mutual emergency response aid. Project will involve partnering with first responders from Matamoros and Cameron County. The project will help to promote sustainability by practicing the last update of the sister contingency plan to evaluate its reliability.	Goal 4	Concluded
The Universidad Autonoma de Chihuahua, proposes to advance on Goal 1, objective 1 by the implementation of a sustainable solution to mitigate dust control in the areas of Ascension and Palomas in Chihuahua. The proposed solution is to implement a planned pasturage process to grow grassland. Project will implement a baseline monitoring system and training on recovery practices of 68,000 has.	Goal 1	In Progress
The University of Texas at Austin (UT), proposes to advance on Goal 2, Objective 3 by providing information to local binational stakeholders, about sources of water pollution to the Rio Grande and by gathering information from key stakeholders about potential local solutions to the river's water quality problems in the portion of the river between Falcon Dam and the Gulf of Mexico. The project proposes to organize 5 workshops and develop MOU among stakeholders.	Goal 2	In Progress

Printed On: February 2, 2016

The Brownsville Public Utilities Board, a government entity, proposes to advance on Goal 2, Objective 2 by implementing a public FOG campaign, targeting businesses with violations and reaching out to them. It will also provide education through community outreach and public awareness through 4 quarterly workshops. The grant will help leverage funds of $49,561 from the City.	Goal 2	Concluded
The Universidad Autónoma de Tamaulipas, proposes to advance on Goals 2, 3 and 5 by improving the implementation of environmental legislation, strengthen the environmental cooperation and exchange of information between Nuevo Laredo, Tamaulipas and Laredo, Texas, and train environmental inspectors and staff of the municipal environmental unit. The grant will help leverage funds with $5,500 from Universidad Autónoma of Tamaulipas.	Goal 5	In Progress
The project consists in educate City of Pharr residents on environmental sustainability and related proper solid waste disposal methods.	Goal 3	Concluded
Inform and educate residents about the benefits of reusing electronics; the need to practice responsible consumption, as well as the importance of giving an appropriate final destination for these wastes	Goal 4	Concluded
The project will promote specific research and educational topics emphasizing how green infrastructure strategies can be utilized to mitigate stormwater runoff.	Goal 2	In Progress
The project consists in establish a sustainable program that allows the proper disposal of biosolids on agricultural soils in the region.	Goal 3	In Progress
Using green infrastructure techniques establish passive rainwater harvesting systems on a community park in the intersection of Avenue Valle del Sol and Solares street, in Cd. Juarez Chihuahua.	Goal 2	In Progress
Identifying and including green building and infrastructure elements for progressive home building projects in low-income communities of the western area of Ciudad Juarez, The project will seek to identify and include technical assistance services to advance innovative mechanisms, tools, and products (technologies) for building resiliency in housing units. Additionally, t	Goal 2	In Progress
Establish measures for ProAire of the State of Chihuahua from carrying out thematic workshops with the participation of the federal, state and municipal government and the industrial, academic and social sectors.	Goal 1	Concluded

Printed On: February 2, 2016

State	Awarded Amount	RFP	Region
TX	$ 49,776.41	2013	R6
TX	$ 89,750.00	2013	R6
TX	$ 19,830.86	2013	R6
COAH	$ 44,200.00	2013	R6
COAH	$ 17,457.46	2013	R6
CHIH	$ 44,850.00	2013	R6
TX	$ 6,120.08	2013	R6
CHIH	$ 13,375.36	2013	R6
COAH	$ 39,875.00	2013	R6
TX	$ 69,083.50	2013	R6
TAMPS	$ 32,533.00	2013	R6
TX	$ 54,836.16	2013	R6
TX	$ 15,000.00	2013	R6
TX	$ 15,000.00	2013	R6
TX	$ 26,022.00	2013	R6

Printed On: February 2, 2016

NM	$ 36,963.43	2013	R6
NM	$ 20,000.00	2013	R6
TX	$ 66,470.00	2013	R6
TX	$ 45,455.00	2013	R6
TX	$ 30,000.00	2013	R6
TAMPS	$ 9,385.00	2015	R6
TAMPS	$ 20,866.00	2015	R6
COAH	$ 36,054.00	2015	R6
TX	$ 44,683.00	2015	R6
CHIH	$ 41,388.00	2015	R6
TX	58575	2015	R6

Printed On: February 2, 2016

TX	$ 25,000.00	2015	R6
TAMPS	$ 11,000.00	2015	R6
TX	$ 36,390.00	2015	R6
COAH	$ 16,777.20	2015	R6
TX	$ 38,885.00	2015	R6
CHIH	$ 48,510.00	2015	R6
CHIH	$ 43,204.00	2015	R6
CHIH	$ 50,000.00	2015	R6
CHIH	$ 25,000.00	TR2-2016	R6

Printed On: February 2, 2016

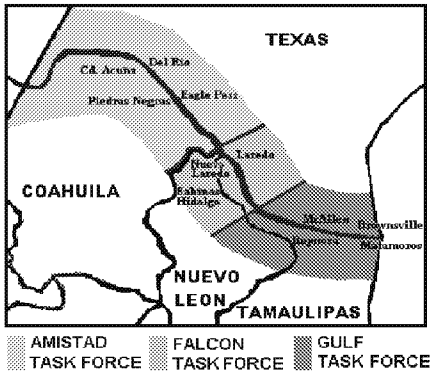
BORDER 2020

FINAL REPORT ON THE 2013-2014 Action Plan

for the TX-COAH-TAMP-NL Regional Workgroup

December 2014

(original plan published in October 2012)



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Waste Regional Priorities

1. Address problems of improper waste disposal:
   a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
   b. Expand environmental education related to waste issues
   c. Close and remediate open dumps wherever required by regulation
2. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Construction of sanitary landfills
2. Attention to waste disposal in gas drilling operations
3. Harmonization of protocols related to coal mining and remediation and to petroleum materials

ED_002319B_00013909-00001

4. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Monitoring of drilling operations in the Eagle Ford Shale

Gulf Task Force

1. Increased recycling
2. Continuing capacity-building at the local, state, and federal levels of government
3. Technical exchanges, including best practices and lessons learned

Following there is a list of the emerging topics that were discussed during the dialogues with the State representatives, complemented with the minutes takes from the task force meetings during 2014. With the State representatives, a conversation in terms of their perspectives for the next two years was held, for programs and lines of action aligned with Border 2020, and here are the results:

Source:
Nuevo León: Norma Rangel
Coahuila: Oscar Flores
Tamaulipas: Diana Caballero

Goal 3: Promote Materials Management, Waste Management and Clean Sites

- Residential hazardous waste Management program in Acuña, Coahuila
- Scrap tire management program in Acuña, Coahuila
- Waste segregation program in 5 manantiales (Allende, Villa Unión, Zaragoza, Morelos y Nava), Coahuila
- Waste prevention and integral management municipal program, as well as composition and generation study in Rio Bravo y Reynosa, Tamaulipas
- Waste prevention and integral management municipal program, as well as composition and generation study in Camargo, Guerrero, Díaz Ordaz, Miguel Alemán y Mier, Tamaulipas
- Waste prevention and integral management municipal program, as well as composition and generation study in Nuevo Laredo, Tamaulipas
- Waste prevention and integral management municipal program, as well as composition and generation study in Matamoros y Valle Hermoso, Tamaulipas
- Updated diagnosis of the required infrastructure to attack the solid waste problem in Nuevo León.
- Dotar de equipamiento a todos los municipios fronterizos para el abatimiento de las llantas de desecho.
- Organic waste recyclable programs/projects
- Diagnosis to determine the installed capacity for the integral waste Management generated in Shale gas extraction
- Outreach program for market value on solid waste since its source
- Outreach municipal program and synergy with the private sector on e-waste management
- Residential Hazardous Waste Collection Center in Tamaulipas and Coahuila
- Plastic bag reduction program in ciudad Acuña, Tamaulipas

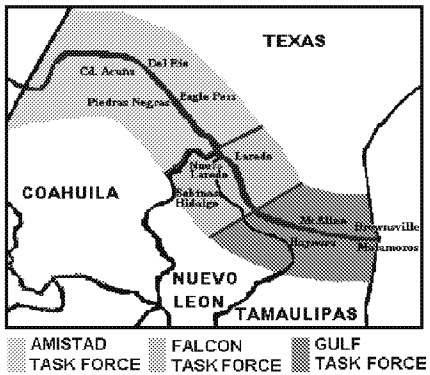
ED_002319B_00013909-00002

Border 2020

2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



Note: This Border 2020 Action Plan does not include infrastructure projects related directly to Border 2020 goals and objectives in air, water, and waste that have been financed in part or in full by the binational North American Development Bank. For information on those projects, see http://www.nadbank.org/.

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila	Unknown	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarnat.tamaulipas.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013.	SEMARNAT implemented the program very successfully in Tamaulipas and on a very limited basis in

ED_002319B_00013909-00003

					Lic. Alejandro Manriquez Ramirez (SEMARNAT/Coahuila), educacion@coahuila.semarnat.gob.mx	Hold an information exchange meeting w/Texas 2014	Coahuila. No information is available from Nuevo León. By mid-2013 in Tamaulipas, 135 schools had been registered in the program—33 in Nuevo Laredo, 50 in Reynosa, and nine in Matamoros. SEMARNAT Coahuila has certified one school in Cd. Acuña for the program.
3.1.02	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers, and workshops at schools.	Cameron County and the Valley Proud Environmental Council	$10,000	Lower Rio Grande Valley Development Council, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the project by the end of 2013.	Cameron County and the Valley Proud Environmental Council engaged in a media campaign against illegal dumping, using billboards and newspapers throughout the Lower Rio Grande Valley. The two entities received numerous phone calls during the campaign, expressing concern about the trash that they had seen dumped throughout the valley.
3.1.03	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions.	The Cities of Pharr, Mission, McAllen, and Mercedes, and the Town of Bayview	$160,000	Lower Rio Grande Valley Development Council, TCEQ, and individual local	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org (956) 682-3481	Finish the five separate but related projects by the end of 2013.	All cities except one completed their projects (Bayview cancelled its activity). The cities expanded and enhanced their recycling capabilities at their recycling centers by purchasing mobile recycling trailers,

				governme nt			forklifts, and other equipment. Also, Pharr has introduced Curby the recycling robot in outreach activities.
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio of Nuevo Laredo		The City of Laredo Environme ntal Services local partners, and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), lnava1@ci.laredo.tx.us	Establish an organization in 2013 in Nuevo Laredo and affiliate with Keep America by the end of 2014.	The project's objectives are expected to be fully completed in early 2015. Reciclado en Acción/Fundación Verde was established in 2013, and initiated environmental awareness events in Nuevo Laredo. The City of Laredo Environmental Services will be covering the membership fees (about $6,000) for the organization to be affiliated with Keep America Beautiful.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public bins in parks, to include all elementary schools in Nuevo Laredo.	Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program) valencia_osvaldo@hotmail.com	Install the bins at all elementary schools in 2013 and start relevant environmental education programs for students.	The project was completed. Bins were installed in elementary schools and environmental education conferences were resumed at the schools in February 2013.
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA (State of Tamaulipas)	$ 300,000	EPA/SEDUMA/SEMARNAT	Dr. Silvia Casas (SEDUMA), silvia.casas757@gmail.com	Reach out to 100% of the border cities.	This project was re-numbered and is now #6.0.07
3.1.09	Redesign and extend coverage of the *E-Conexion* newsletter as a strategy to share best practices.	SEDUMA (State of Tamaulipas)	$ 30,000	SEDUMA	Dra. Silvia Casas (SEDUMA),	Extend the dissemination of *E-Conexion* to 100% of	SEDUMA expanded the electronic distribution to include 43

ED_002319B_00013909-00005

					silviacasas757@gmail.com	the Tamaulipas municipalities.	municipalities, all their state offices, environmentally certified schools (SIMA-E), and private industry. To save paper and ink, SEDUMA no longer prints and distributes hard copies. Minor changes were made to the design and the use of background colors is minimized.
3.1.10	Organize a visit to Austin, TX by private and public sector Mexican waste management specialists to see a model sanitary landfill and municipal recycling operation	Red Ambiental (headquartered in Monterrey, Nuevo León) Secretariat for Sustainable Development (State of Nuevo León), and the TCEQ (State of Texas)	Unknown	Red Ambiental	Eddie Moderow (TCEQ), eddie.moderow@tceq.texas.gov	Organize the visit for October 2014.	The project was completed. The visiting group included fourteen public- and private-sector officials from six Mexican states. They spent two days in Austin in October, talking with Austin City officials and TCEQ staff, and visiting the Texas Disposal Systems landfill in Creedmore and the Balcones Resources' recycling facility in Austin.
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat (State of Nuevo León), and TCEQ (State of Texas)	$35,000	EPA border grant through the BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com	Survey border municipalities on both sides of the border, prepare a "best practices" manual, and perhaps hold a regional workshop	The project was completed in 2013. SDS surveyed more than 20 local governments on both sides of the border and then developed a manual for local

							governments on best practices for scrap-tire management. With this manual as the focus, SDS collaborated with the TCEQ to organize a binational workshop held in March 2013. Representatives of 10 local governments plus state and federal governments, as well as private industry, attended the workshop.
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	SDS (Nuevo León), SEMARNAT, and Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo, Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	This particular project has been cancelled and replaced by a related but different project in the same municipio. See project # 3.2.08 below.
3.2.03	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, Texas.	Texas A&M University – Kingsville (TAMUK)	$15,000	EPA border grant through the BECC	Dr. Kim Jones kfkdj00@tamuk.edu	Through a demonstration project, assist communities in building capacity for scrap-tire management.	With the grant funds available, TAMUK managed a demonstration project that baled approximately 62,500 scrap tires (625 bales) and used 125 of the bales as part of the sub-base of a section of a landfill road bed in Brownsville. TAMUK is looking for an additional $15-20K to use the remaining 500 bales and complete the extension of the road.

3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	Unknown	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Significant progress was made. By mid-2013 compost was being generated by COMAPA and applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center. The utility subsequently began distributing compost to schools for landscaping and gardening and also uses it at COMAPA facilities. COMAPA uses 5 to 10% of all the bio solids generated at the wastewater treatment plant for the compost. In 2015 the utility expects to sign an agreement with the municipio to purchase equipment that will enable generation of more compost, and then begin selling it to commercial establishments and businesses.
3.2.05	Implement a collection and management program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	The program will be in full operation by spring 2013.	The program was in full operation in 2013, after the first steps had been taken in August 2012. In 2013, the city collected about 27.7

							tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap-tire management program that includes valuation.	SEDUMA (Tamaulipas)	$ 400,000	SEDUMA/SEMARNAT/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Develop public policy and a management plan for scrap tires	The project is on hold.
3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA (Tamaulipas)	$ 300,000	SEDUMA/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Complete action plan	The project is on hold.
3.2.08	Study and characterize the municipal solid waste stream in Sabinas Hidalgo, Nuevo León.	SDS (Nuevo León) and Municipio of Sabinas Hidalgo, Nuevo León	$25,156	BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	Complete the study by 2015.	[This project is a replacement for project # 3.2.02, and was not initiated until mid-2014.] By the end of 2014, the study was 35% completed.

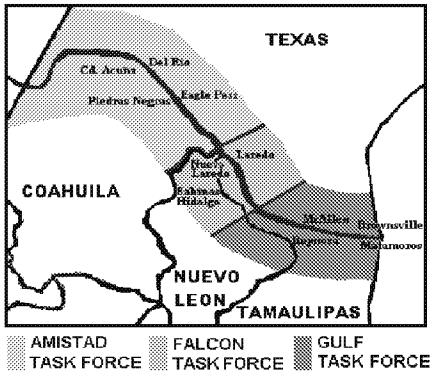
Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	Complete the remediation of old oxidation lagoons in Piedras Negras.	Municipio de Piedras Negras and SEMA (State of Coahuila)	$300,000	SEMA	Maria Teresa Molina, Municipio de Piedras Negras, teduada@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road extension to and a green area at the site.	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. Piedras Negras has not responded to inquiries about the project during 2013 and 2014.
3.3.02	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass.	City of Eagle Pass	$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.us	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Remediation of a portion of the site was carried out prior to 2010. The city will seek assistance through the TCEQ's Brownfields Site Assessments Program to determine whether

							the site meets the federal definition of a brownfields site and is eligible for funding under the EPA's brownfields program.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA (State of Coahuila), Municipio de Piedras Negras	$400,000	SEMA	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	By mid-2013, SEMA determined they needed to perform a feasibility study on using coal pits as disposal sites for scrap tires. No information has been available since then.

BORDER 2020

2013-2014 Action Plan
for the TX-COAH-TAMP-NL Regional Workgroup

June 3, 2014



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
   a. Analyze emissions and emission sources in specific airsheds
   b. Engage in both road-paving and reforestation (using native species)
   c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
   d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
2. Improve water quality by taking the following actions:
   a. Evaluate the portion of the Rio Grande watershed that is in the region
   b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
   c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
   d. Develop more applications for the re-use of water
   e. Reduce non-native species in the water bodies
   f. Continue and expand environmental education efforts such as “Adopt the River” and “Day of the River”

ED_002319B_00013916-00001

3. Address problems of improper waste disposal:
   a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
   b. Expand environmental education related to waste issues
   c. Close and remediate open dumps wherever required by regulation
4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Reduction of energy consumption in buildings and street lighting
2. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
3. Construction of sanitary landfills
4. Attention to waste disposal in gas drilling operations
5. Continuing attention to emergency response
6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
7. Improvement of vehicle inspection programs in Coahuila
8. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Re-use of treated water
2. Monitoring of drilling operations in the Eagle Ford Shale
3. Finalizing the cross-border contingency plan

Gulf Task Force

1. Improvement of water-related infrastructure, and increased attention to wáter conservation and re-use
2. Increased recycling
3. Continuing capacity-building at the local, state, and federal levels of government
4. Technical exchanges, including best practices and lessons learned

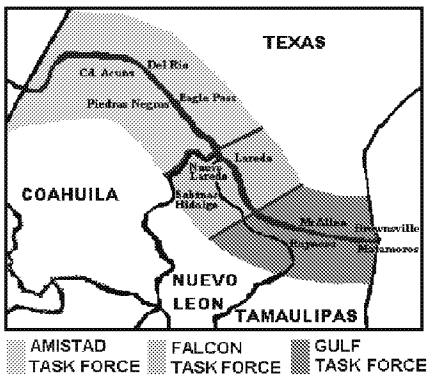
ED_002319B_00013916-00002

Border 2020

2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures							
1.1.01	Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ	$700,000	SEMA Coahuila	Miguel Ángel Leal Reyes (SEMA) miguel.reyes@sema.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, Monclova, Saltillo, and Ramos Arizpe .	Coahuila initiated vehicle inspections in border cities in June 2012. SEMA signed a Memorandum of Agreement with the TCEQ in May 2013; specific forms of collaboration are being negotiated.

Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects							
1.5.01	Implement a competitive grants program aimed at local governments, dedicated to improvements in energy efficiency.	University of Texas at Austin, LBJ School	$175,000	EPA and TCEQ	David Eaton (LBJ School), eaton@mail.utexas.edu	Complete all projects by August 2013	UT issued RFP in October 2012. An independent committee reviewed applications and recommended six projects that were then funded by UT—two cities, an irrigation district, and three school districts—in early 2013. All six projects were completed by July 2013.
1.5.02	Initiate Phase 2 of the State Climate Action Plan for Coahuila (PEAC): Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC	CICC is installed Integrated Technical Working Groups (TWG) and the Advisory Group (AG). Consultant hired. Local Coordinator and local experts recruited	Develop a document with quantitative measurements of reductions in GHG emissions from the selected Mitigation Policies (MP), the impacts of these MP in local Gross Domestic Product (GDP), employment and per capita income and amount of funds to finance new MP.
1.5.03	Initiate Phase 2 of the State Climate Action Plan for Tamaulipas (PEAC): Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$151,000	BECC	Tomás Balarezo, BECC	State strategy work is redesigned. CICC is installed. Integrated Technical Working Groups (TWG) and the Advisory Group (AG). Consultant hired	Develop a document of Selected Mitigation Policies through an open and participatory process.
1.5.04	Research the potential for harnessing wind power for electricity in Tamaulipas.	SEMARNAT and SEDUMA		SEMARNAT will seek	Delfino.ramirez@semarnat.tamaulipas.g	Conduct research and explore business opportunities	A forum was held in October 2012. No information available

				funds	ob.mx		since then.
1.5.05	Research the potential for harnessing wind power for electricity generation in Nuevo León.	Secretaría de Desarrollo Sustentable de Nuevo León	$10,000	Mexican federal funds/CONACYT	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	SDS continues to search for funding.
1.5.06	Construct and operate a facility that extracts methane gas from the Nuevo Laredo landfill and burns it to generate electricity for the municipality.	Municipio de Nuevo Laredo and Setasa (Servicios de Tecnología Ambiental S.A.)	$3.5 million	Private sector; a company will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	Sergio Martínez López sergiomartinezlopez@hotmail.com	Have the facility in full operation by the end of 2014.	A feasibility study was completed 2008 with funding from USAID. Issuance of a tender for construction is pending (the municipio needs to obtain the property title).
1.5.07	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty commercial trucks in cross-border trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum.	SEMARNAT and the Municipio of Nuevo Laredo	$50,000	EPA border grant through the BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program), eduardo.olivares@semarnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program), valencia_osvaldo@hotmail.com	Complete the project by the end of 2013.	The final report Generated information to raise awareness to the transportation companies on the issue of emissions of diesel. Information of 2,756 trucks and 456 companies had. 50% of the sample trucks are 2000 or earlier model, the trucks are aged over 13 years, and 84% are 2006 model or earlier, aged 7 years or more.
1.5.08	Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo,	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava,	1,400,000	SEMA Coahuila	Miguel Ángel Leal Reyes (SEMA Coahuila)	Have air quality monitoring network in operation for Piedras	SEMA has begun working with local officials to include these

	Coahuila.	Sabinas, Saltillo			miguel.reyes@sema.ob.mx	Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila	projects in the plans of the applicable "Metropolitan Zones".
1.5.09	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Olga Rumayor (SEMA Coahuila) olga.rumayor@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10 buildings to pilot retrofit technologies.	The project is still in the planning phase, and will be proposed to the BECC to obtain support.
1.5.10	Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas seduma@tamaulipas	Have vehicle verification program in the border area of the state by end of 2014	Pilot program focused on the state-owned fleet was initiated in early 2013.
1.5.11	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential in Tamaulipas.	SEDUMA	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	Prepare action plan for nine wind power projects and state's strategic energy program	Baseline information is being collected.
1.5.12	Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA	Por definirse	SEDUMA/ EPA/COCEF	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	By 2014, the system will operate at 100% with programmatic consistency standards	8 municipalities of the State and have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Laredo Nvo, Victoria, Mante, Tampico, Madero and Altamira). Currently only 3 of these eight municipalities are operating the system of air monitoring (Nvo Laredo, Victoria, Tampico)
1.5.13	Implementation of a environmental management system as a strategy for energy efficiency in Tamaulipas.	SEDUMA/Municipios	$ 100,000	SEDUMA/ EPA/COCEF	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	By 2014, train in collaboration with ICLEI and INECC 100% of the border municipalities	State trained 16 municipalities from the border region and the San Fernando Valley region, with an attendance of approximately 100

							people, the workshop was held in Reynosa.

Goal # 2: Improve Access to Clean and Safe Water

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
2.0.01	Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant.	Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)		SADM, BECC, and National Water Commission	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com y Carlos Avila, carlos.avila@sadm.gob.mx	Have the plant in operation by the end of 2014.	Project Canceled
2.0.02	Organize a "Water Awareness Summit" to educate the public in the Lower Rio Grande Valley about where their water comes from, how the planning process works, what the outlook is, and the importance of conservation.	State Representative Eddie Lucio III, TCEQ, cities and their water utilities, the Rio Grande Regional Water Authority, and the Lower Rio Grande Valley Development Council	$10,000-15,000	Local funding efforts/sponsors	Claudia Lozano (TCEQ) claudia.lozano@tceq.texas.gov	Hold the conference in early 2013	The first Water Awareness Summit was held in February 2013. More than 200 people attended and expressed interest in making the event annual. A second Summit was held in March 2014, with approximately 300 attendees, and a third Summit will be held in early 2015.
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.01	Provide teacher training workshop(s) and/or on-site facilitators to implement educational water quality monitoring events in conjunction with 2012/13 World Water Monitoring	Texas Partnership for Water Education (TPWE), EPA, WEAT, TAWWA Scout Troops, ISDs,	Funding needed varies with # of participants	Various funding possibilities will be explored	Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Teachers &/or students, as well as interested community members will have identified monitoring site. Sampling results	Awaiting information

	Challenge.	informal environmental education (EE) providers	Testing Kits $25/ 30 individuals/ site.			are submitted to TPWE's WWMC Program Coordinator.	
2.2.02	Promote energy management practices among Texas water and wastewater utilities by conducting quarterly meetings on energy management planning, training on a pumping system assessment tool, and on-site energy efficiency assessments (key cities include Laredo, Roma, Mission, Agua Specialty Utility District, Edinburg, McAllen, Pharr, Weslaco, Mercedes, Harlingen, and Brownsville).	Partner with a university to conduct meetings, trainings and on-site energy assessment involving engineering students. 2012 partners are the Texas Manufacturing Assistance Centers at the University of Texas at Arlington and the University of Texas Pan American.	Funding sought $75,000/yr or $150,000	Various funding possibilities will be explored	David Reazin, EPA Region 6 (214) 665-7501	Hold quarterly meetings to develop energy management plan and benchmark energy use and costs, 1 PSAT training, and 2 on-site assessments.	Awaiting information
2.2.03	Organize a workshop in Laredo for water utilities and the restaurant industry to discuss best practices related to abatement of discharges of fats, oils, and grease (will also involve Nuevo Laredo).	City of Laredo water utility, Webb County, and Nuevo Laredo	$23,000	EPA border grant through the BECC	Karla Robles (City of Laredo Utilities) krobles@ci.laredo.tx.us	Hold the workshop by the spring of 2013 and then follow-up meetings with utilities to discuss implementation of FOG programs in the summer and fall of 2013.	The project was completed in January 2014. Laredo Utilities organized a binational workshop in March 2013, presenting "best management practices" with regard to management of fats, oils and grease. More than 350 people, including representatives from the maquiladora sector in Nuevo Laredo and restaurants in both cities, attended the event. Laredo Utilities then coordinated two follow-up meetings in August and December 2013, at which participants shared their experience in applying the practices, and also

							produced a7-minute video about FOG management, for use in education of commercial establishments. Out of 22 establishments that participated in the original workshop, 14 decreased their amount of FOG generation more than 50%.
2.2.04	Conduct training for small businesses in the Reynosa area on best practices related to discharges of fats, oils, and grease (will include before and after measures).	Municipio of Reynosa	$16,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798, ecologiareynosa@hotmail.com	Organize a workshop or training event(s).	Project canceled.
2.2.05	Implement a public campaign to increase awareness of problems of non-point-source pollution in the Lower Rio Grande Valley of Texas, through signs posted on roadways and at public facilities, messages on a school district television station, presentations at numerous public events and meetings, and newsletters of various organizations.	Fourteen cities in the Lower Rio Grande Valley (LRGV) that are members of the Texas Pollution Discharge Elimination System Stormwater Task Force, Texas A&M Kingsville, school districts, and NGOs	$30,000	EPA border grant through the BECC	Javier Guerrero (Lower Rio Grande Valley TPDES Stormwater Task Force, Texas A&M University-Kingsville), 956- 457-3023 jguer0351@aol.com	Project Completed by end of 2013.	Workshops were done with the Cities of Harlingen, Kingsville, San Benito, La Feria, Palm Valley, Primera, Weslaco, Donna, Alamo, San Juan, La Joya, Brownsville, Palmview, and Mission. A total of 104 signs were installed by those cities at various locations, and those locations were GPS'd.
2.2.06 [Sub-Obj. 3a]	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local governmental agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly.holligan@tceq.texas.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Terms of reference were developed that serve as the framework used by participating entities in the collaboration. In February and July 2013, TCEQ hosted training sessions on water quality modeling software (QUAL-TX and LAQUAL) for Mexican agency and

							EPA staff.
2.2.07 (Sub-obj. 2b)	Install/upgrade new sewer lines connected to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank (NADB)	Claudia López Aguilar (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) claudialopez@comapanuevolaredo.gob.mx New Manager CP Delfino González Muñoz Tel: 867-8900900 dgcdelfino@hotmail.com dianarigal@comapanuevolaredo.gob.mx	Complete the project by December 2014.	BECC certified the project in September 2012. COMAPA will complete the construction of four sewer collectors to the wastewater treatment plant by August 2013 and will work with CONAGUA on securing funding to address sewer discharges (about 280,000 GD) from La Joya Creek to the Rio Grande. COMAPA and the municipio are in the process of signing an agreement with the property owner to allow crews to repair the discharge point from La Joya creek since it is on private property. Along with this effluent discharge, COMAPA has identified five discharge points. Here is a breakdown on the work being conducted on these collectors: More than 230,000 gallons per day from the 5 de febrero collector have been eliminated and 40% of the repairs have been completed for the second phase

							90% of the work to repair the Guatemala collector has been finished. The total amount (420,000 GD) that is currently discharging should be eliminated by May 2014 Work is underway to rehabilitate the America, Anahuac and Iturbide collectors, which are discharging about 1.2 MGD. All sewer discharges should be eliminated by November 2014.
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.01	Develop and produce region-specific supplemental materials necessary to produce a *Waters to the Sea*- Rio Grande module. (*Place-based education with comprehensive watershed focus).*	Center for Global Environmental Education (CGEE)- Hamline University. Harte Research Institute @ A&M-Corpus Christi. EPA R6, WEAT, AWWA.	Approx $100,000 in 2013 $ 50,000 in 2014	Various funding possibilities will be explored	CGEE- Tracy Fredin Karen Bick, EPA, Region 6 (214) 665-7539 bick.karen@epa.gov	Recruit and establish an advisory board, produce videos and other materials, identify one or two ISDs to pilot program, and conduct training for at least 25 teachers in 2014.	Exploratory discussions were underway in 2012. No information since then.
2.3.02	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila.	CEAS Coahuila, SEMA Coahuila	$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Complete the studies by early 2014	CEAS has completed the feasibility studies and is making efforts to implement water management programs in those municipalities.
2.3.03	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas.	SEMA Coahuila, Municipio de Piedras Negras and Municipio de Acuña	$400,000	Coahuila will fund first part and will be seeking	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Begin implementing the campaigns and conclude the land conservation agreements by the end of 2014.	SEMA obtained funding from the EPA through the BECC in November 2013 to restore and conserve the Arroyo

				funding for the rest			Las Vacas. SEMA has developed partnerships with TCEQ, Ciudad Acuña, local academic institutions, and UT Austin, and is finalizing the workplan. The project will promote awareness and take actions to improve the eco-system of the arroyo.
2.3.04	Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, Profauna	$85,000	SEMA Coahuila, CONANP, Profauna – and will seek other funding sources	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sema.gob.mx	By the end of 2014, increase the invasive species plant removal program in the Rio Grande.	No progress yet.
2.3.05	Organize a regional workshop to disseminate "best practices" related to water conservation policy, programs (such as EPA's Water Sense), and public education, and implement enhanced programs in at least one pair of sister cities.	City of Laredo, EPA, TCEQ, TX Water Development Board, Piedras Negras Technological Institute	$6,000	City of Laredo, EPA, TCEQ, and local sponsors	Miguel A. Pescador mpescador@ci.laredo.tx.us Debora Browning EPA, Region 6 browning.debora@epa.gov	Hold a regional workshop in Laredo by spring 2013, and implement a new campaign in two sister cities by 2014. Enlist 10 new WaterSense Partners.	Workshop was hosted by Laredo in March 2013. More than 100 persons attended. No new WaterSense Partners by mid-July 2013.

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo	??	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarna	Reach 150 schools in the 3 Mexican States by July 2013.	Program very successful in Tamaulipas--135

	possible use in Texas.	León, and Coahuila			t.tamaulipas.gob.mx	Hold an information exchange meeting w/Texas 2014	schools are registered in the Green School Program, of which 33 are in Nuevo Laredo, 50 in Reynosa and 9 in Matamoros. Information not available from other states.
3.1.02	Design and implement a bilingual campaign against illegal dumping in Cameron County, Texas, using billboards, newspapers, and workshops at schools.	Cameron County and the Valley Proud Environmental Council	$10,000	Lower Rio Grande Valley Development Council, TCEQ	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the project by the end of 2013.	The project has been completed.
3.1.03	Through purchase of equipment, enhance the recycling programs in three local jurisdictions and composting operations in two jurisdictions.	The Cities of Pharr, Mission, McAllen, and Mercedes, and the Town of Bayview	$160,000	Lower Rio Grande Valley Development Council, TCEQ, and individual local government	Marcie Oviedo (Lower Rio Grande Development Council), moviedo@lrgvdc911.org, (956) 682-3481	Finish the five separate but related projects by the end of 2013.	As of mid-July 2013, four of the five entities had completed their projects; the project in McAllen is in progress.
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio de Nuevo Laredo	$5,000	The Gateway Rotary Club and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), lnava1@ci.laredo.tx.us	Recruit reps of non-profit organizations and school officials as members of a board of directors in 2013.	No progress toward target as of July 2013.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public bins in parks, to include all elementary	Municipio de Nuevo Laredo	???	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology	Install the bins at all elementary schools in 2013 and start	Environmental education conferences were resumed at city elementary schools in

	schools in Nuevo Laredo.				Program) valencia_osvaldo@hotmail.com	relevant environmental education programs for students.	February 2013.
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA	$ 300,000	EPA/SEDUMA/SEMARNAT	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	Reach out to 100% of the border cities	The SIMA Program has been implemented in 30 schools in the municipality of Matamoros. State has invested 1 million 800 thousand pesos for replacement of furniture and equipment of high efficiency consumption of water and energy, clean energy production, waste recycling, rainwater collection and environmental education workshops. In the 2nd half of 2014 will support equipment (containers for medical waste and saving features) at 2 participants SIMA schools.
3.1.09	Redesign and extend coverage of the E-conexion Newsletter as strategy to share best practices.	SEDUMA	$ 30,000	SEDUMA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Extend the dissemination of the E-Conexion to 100% of the Tamaulipas municipalities	
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							
3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat, State of	$35,000	EPA border grant	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.co	Prepare a "best practices" manual and perhaps hold a regional	Tire manual for tire recollection center

		Nuevo León		through the BECC	m	workshop	
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	Sustainable Development Secretariat, SEMARNAT-Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	Project canceled
3.2.03	Assess the feasibility of using scrap tires for heavy-duty road-bed construction in Brownsville, Texas.	Texas A&M University – Kingsville	$15,000	EPA border grant through the BECC	Dr. Kim Jones kfkdj00@tamuk.edu	assist rural communities to build capacity for sustainable waste management, including the development of scrap tire management and disposal plans for long term solutions of the regional scrap tire problem in rural communities	The project has been completed. This demonstration project safely disposed of 125 tire bales which is approximately 12,500 waste tires buried; also about 500 bales (50,000 waste tires) were disposed in the construction of one road in Brownsville
3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	$30,000 ¿?	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Currently the compost is being applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center.
3.2.05	Implement a collection program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	Promote sustainable routes to properly manage waste streams generated by electronic waste in Reynosa, Tamaulipas	Project completed by the end of 2013. The city collected about 27.7 tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap tire management program that includes valuation.	SEDUMA	$ 400,000	SEDUMA/SEMARTANT/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Develop public policy and management plan for scrap tires	No progress on the project

3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA	$ 300,000	SEDUMA/EPA	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	Complete action plan	No progress on the project

Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	Complete the remediation of old oxidation lagoons.	Municipio de Piedras Negras and State of Coahuila environmental agency (SEMA)	$300,000	State of Coahuila environmental agency (SEMA)	Alfredo Lucero (Piedras Negras), aalm68@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road extension to and a green area at the site.	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. No new information available.
3.3.02	Clean up an old waste disposal site near the river banks of the Rio Grande in Eagle Pass.	City of Eagle Pass	$3.5 million	City of Eagle Pass plus an additional funding source to be determined	Hector Chavez (Eagle Pass) hchavez@eaglepasstx.us	Finish the remediation in 2013, if supplementary funding can be identified, and then develop a green area on the site.	Remediation of a portion of the site was carried out prior to 2010. The city determined that it was a priority to identify additional funding for completion, but has not sought any funding since that time.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA, Municipio de Piedras Negras	$400,000	¿?	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	SEMA determined they need to perform a feasibility study on using coal pits as disposal sites for scrap tires.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	Develop an emergency response plan for the maquiladoras in Brecha E-99 in Reynosa,Tamaulipas.	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa	$10,000	EPA border grant through the	Dr. Emilio Sonderegger Arriola emilio.sonderegger@l	???	Project canceled.

		Industrial Park Mutual Aid Committee)		BECC	andisgyr.com		
4.2.02	Hold a second "knowledge exchange" on risk mapping for first responders on both sides of the Lower Rio Grande Valley in Texas-Tamaulipas, for the purpose of identifying and gaining access to existing sources of data on hazmat storage and determining additional needs.	Fire departments from Texas and Mexican municipalities in the Gulf Task Force area, EPA, TCEQ, Civil Protección Tamaulipas and Mexico Civil Protección	$30,000(?)	EPA and NORTHCOM	Paige Delgado (EPA), Delgado.paige@epa.gov EPA Region 6	Hold the exchange during the first half of 2013	A first exchange was held in July 2012. As of July 2013, the project is on hold because of the uncertainty of funding from NORTHCOM.
4.2.03	Hold a binational chemical-spill exercise at the World Trade Bridge between Nuevo Laredo, Tamaulipas and Laredo, Texas.	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	$5,000	EPA border grant through the BECC	Lic. Juan Ernesto Rivera Gomez (Civil Protección de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com or ernestorivera5775@hotmail.com New Manager: Ing. Juan Ulises Ochoa Correa uochoa@nuevolaredo.gob.mx juan.u8a@hotmail.com Tel: 867-7124635 867-7124911	Hold the exercise after the Mexican federal government has approved a permit that allows hazardous waste to be transported on this bridge.	The U.S. Department of State issued a "presidential permit" in May 2014 for the use of the bridge for transport of hazardous materials, but the Mexican government is awaiting the completion of a flow study that CONAGUA is conducting in the Río Grande before issuing its permit. If and when a Mexican permit is issued, local officials will organize a binational exercise. Still waiting for a date to finish this study and define next steps
4.2.04	Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	$5,000 -	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho (Protección Civil de Nuevo León). jorge.camacho@nuevoleon.gob.mx New officer: Juan	The objective of this training was to perform a simulation in the World Trade International Bridge (Bridge III) as part of the	Pending approval by the Government of Mexico to cross hazardous materials. Part of the process is to wait for a water quality

	much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.				Ulises Ochoa Correa jochoa@nuevolaredo.gob.mx juan.u8a@hotmail.com Tel: 867-712-4635 867-7128911	training staff of Civil Protection in response to contingencies, taking into account that this port is in the process of authorization to cross hazardous materials eventhoug it already has the infrastructure to handle these materials.	analysis performed by CONAGUA. In reality the materials cross by the Colombia Bridge in Nuevo Leon, but do not have the civil protection resources. In the case of an event, the assistance comes from Nuevo Laredo. Once the permit is released the drill can takes place.
4.2.05	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department), evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com	Hold new meetings of the staff of the two cities in 2013 in order to re-visit the language of the draft revision and possibly develop alternative language.	Laredo officials met in May 2013 to make changes to one sentence in a draft of the new cross-border contingency plan that had been originally prepared in 2009. The changes were intended to clarify that Laredo could not send personnel across the border, because of security and liability concerns, but could assist in other ways. The revised agreement was been approved subsequently by Nuevo Laredo, but has been awaiting action by the Laredo City Council since that time.
4.2.06	Update and improve the cross-border contingency plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b) Del Rio, Texas and Ciudad Acuna, Coahuila.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de	$130,000	EPA border grant through the BECC	Briseida Duarte (Border Environment Cooperation Commission),	Complete new plans by the end of 2013.	The project was completed by the end of 2013. Under contract from the BECC, two workshops were

	which will include risk analysis and development of risk maps.	Ciudad Acuña, BECC, and the Rio Grande Institute			bduarte@coref.org and M.C. Monica de Jesus Pérez Morales (Consultoría y Servicios en Seguridad Industrial y Medio Ambiente, S.A. de C.V.)		organized in the first half of 2012 for staff from the two pairs of sister cities to discuss protocols and risks. After delays and the hiring of a new contractor, additional workshops were held in July 2013. In November of that year, the two sister-city pairs each signed a Memorandum of Cooperation for new cross-border contingency plans. Each community committed to providing resources and mutual aid in case of chemical accidents.

Multi-Goal Projects

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Projects potentially related to some combination of air quality, water quality, water conservation, or waste management							
6.0.01	Organize educational campaigns featuring training sessions for health professionals, health students, and promotoras followed by community outreach in the Laredo and Harlingen areas in Texas, addressing how to reduce pre-natal and childhood exposure to pesticides, lead, solvents, second-hand tobacco, and diesel exhaust.	The University of Texas Health Science Center in San Antonio	$50,000	EPA border grant through the BECC	Claudia Miller, M.D., MillerCS@uthscsa.edu or steer@uthscsa.edu	Complete the project by the end of 2013.	Project completed -- through July 2013, trained 40 promotoras in the N. Laredo/ Laredo and Cameron County/ areas on the hazardous exposures in pregnancy and childhood and how to avoid these exposures. These promotoras have already provided

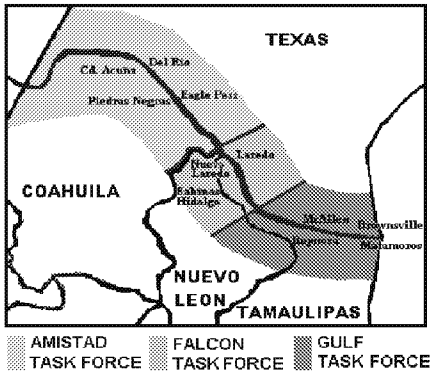
							outreach to 400 families.
6.0.02	Conduct educational workshops/plays on the safe handling and disposal of pesticides for farm workers in the Lower Rio Grande Valley of Texas and in the Laredo area.	Migrants in Action – Weslaco, Texas	$20,000	EPA border grant through the BECC	Noemi Ochoa (Association of Farmworker Opportunity Programs), nochoa@yahoo.com	Produce the EPA-written play "El Moscas y los Pesticidas" using students in two cities in the first half of 2013	Project under development, to be started on August 2014. The outcome expected is to provide capacity awareness to more than 2,000 people from South New Mexico and Texas.
6.0.03	Identify the sources of environmental health hazards through a "knowledge exchange" workshop and establish a binational database on epidemiological data related to these hazards.	Texas A&M Health Science Center: School of Rural Public Health, PAHO, BECC, HIDA-REY COBINA, Hidalgo County Health Dept.	$50,000	EPA border grant through the BECC	Genny Carrillo (Texas A&M Health Science Center, School of Rural Public Health), gcarrillo@srph.tamhsc.edu	Hold the "knowledge exchange" workshop and establish the database by the end of 2013.	[redacted] A database on Environmental and Health issues was created with the US information.
6.0.04	Address children's environmental health issues in Laredo, Texas and Webb County by surveying a sample of homes and identifying health risks, tracking reported exposures through selected hospitals and clinics, developing and implementing a public outreach campaign regarding the identified risks, and identifying and publicizing two relevant online courses available for physicians.	Laredo Health Department	$50,000	EPA border grant through the BECC	Waldo Lopez (City of Laredo Health Department) wlopez@ci.laredo.tx.us	Complete the project by the end of 2014.	The project was completed in December 2013. More than 120 homes were surveyed to analyze the use of household hazardous waste materials. 469 individuals filled out online environmental home assessments, and 155 surveys were completed. The health department adapted a web-based diagnostic tool called Argus 1, which medical personnel can use to obtain information on testing procedures and

							treatment options based on specific symptoms, and trained more than 50 physicians on both sides of the border on its use. Laredo hopes to identify additional funds, to be able to replicate some of the activities in more geographical locations.
6.0.05	Organize an annual Environmental Summit for the public in the Lower Rio Grande Valley, in cooperation with State Representative Eddie Lucio III's office.	TCEQ, and cities in the Lower Rio Grande Valley	$15,000	Local sponsors, EPA	Imelda Pena, TCEQ Imelda.pena@tceq.texas.gov	Hold an Environmental Summit in fall of 2013 and fall of 2014.	The fourth annual Valley Environmental Summit was held in October 2013. An estimated 300 people attended. Their priority interests were illegal dumping, marine debris, and community cleanup programs. The fifth summit is scheduled for October 2014.
6.0.06	Organize an annual Environmental Summit for the public in Webb County, in cooperation with State Senator Judith Zaffirini's office.	TCEQ and the City of Laredo	$15,000	Local sponsors, EPA	Carmen Ramirez, TCEQ, carmen.ramirez@tceq.texas.gov	Hold an Environmental Summit fall of 2013.	The fourth annual Laredo Environmental Summit was held in October 2013, attended by more than 400 people. Speakers discussed recycling, energy efficiency, and water conservation. The next summit is being planned for October 2014.

BORDER 2020

2013-2014 Action Plan
for the TX-COAH-TAMP-NL Regional Workgroup

June 3, 2014



The **Four-State Regional Workgroup** is the most complex of the four regional workgroups, because of its geographical expanse and the number of municipalities. The region includes parts of three states and a total of at least 29 municipios on the Mexican side, and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically based Task Forces—Amistad, Falcon, and Gulf, each of which has established subject-specific committees related to its priority concerns.

During the first half of 2012, the various committees have held meetings to discuss initial priorities for the Border 2020 program, and a regional meeting of leaders was held in June to develop a consensus of priorities at the task force and regional workgroup levels.

Regional Priorities

1. Improve air quality through the following approaches:
   a. Analyze emissions and emission sources in specific airsheds
   b. Engage in both road-paving and reforestation (using native species)
   c. Establish or improve vehicle inspection programs in those cities where the respective federal governments require them
   d. Increase energy efficiency at the consumption level and the use of renewable energy at all appropriate levels
2. Improve water quality by taking the following actions:
   a. Evaluate the portion of the Rio Grande watershed that is in the region
   b. Reduce contamination by providing wastewater treatment to unserved communities in the watershed
   c. Improving the existing treatment facilities by applying the most effective technologies and providing training to operators
   d. Develop more applications for the re-use of water
   e. Reduce non-native species in the water bodies
   f. Continue and expand environmental education efforts such as “Adopt the River” and “Day of the River”

ED_002319B_00013917-00001

3. Address problems of improper waste disposal:
    a. Develop comprehensive plans for solid waste management, including special wastes (such as sludge from wastewater treatment plants, scrap tires, and used electronic products) and hazardous wastes (residues from pesticides, extraction of fossil fuels, and medical facilities), looking for economic/productive uses of wastes whenever possible
    b. Expand environmental education related to waste issues
    c. Close and remediate open dumps wherever required by regulation
4. Assure that each project includes a component of environmental education (such as teacher training or building an environmental library), at least one indicator related to public health, and inspection and surveillance

Individual Task Force Priorities

Amistad Task Force

1. Reduction of energy consumption in buildings and street lighting
2. Increased use of alternate and renewable energy sources (such as landfill gas and solar energy)
3. Construction of sanitary landfills
4. Attention to waste disposal in gas drilling operations
5. Continuing attention to emergency response
6. Harmonization of protocols related to coal mining and remediation and to petroleum materials
7. Improvement of vehicle inspection programs in Coahuila
8. Joint programs in communication and environmental education, and development of an environmental educators group

Falcon Task Force

1. Re-use of treated water
2. Monitoring of drilling operations in the Eagle Ford Shale
3. Finalizing the cross-border contingency plan

Gulf Task Force

1. Improvement of water-related infrastructure, and increased attention to wáter conservation and re-use
2. Increased recycling
3. Continuing capacity-building at the local, state, and federal levels of government
4. Technical exchanges, including best practices and lessons learned

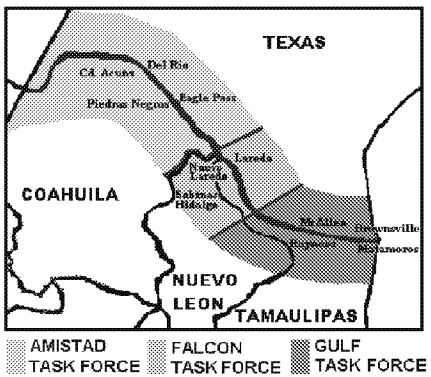
ED_002319B_00013917-00002

Border 2020

2013-2014 Action Plan Grid for the Four-State Regional Workgroup

Legend:

- Activity covers at least two task force areas
- Gulf Task Force
- Falcon Task Force
- Amistad Task Force



GOAL # 1: Reduce Air Pollution

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, reduce the number of vehicles operating in the border region that do not comply with the respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible measures							
1.1.01	Continue to develop Coahuila's vehicle inspection program, partly in consultation with Texas regarding the latter's experience.	SEMA (Coahuila), COMIMSA, Municipio de Piedras Negras, Municipio de Acuña, TCEQ	$700,000	SEMA Coahuila	Miguel Ángel Leal Reyes (SEMA) miguel.reyes@sema.gob.mx	Inspect 40% of the vehicles in Acuña, Piedras Negras, Monclova, Saltillo, and Ramos Arizpe .	Coahuila initiated vehicle inspections in border cities in June 2012. SEMA signed a Memorandum of Agreement with the TCEQ in May 2013; specific forms of collaboration are being negotiated.

Objective 5: By 2020, reduce emissions and associated impacts, through energy efficiency and/or alternative/renewable energy projects							
1.5.02	Initiate Phase 2 of the State Climate Action Plan for Coahuila (PEAC): Quantification of the mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC	CICC is installed Integrated Technical Working Groups (TWG) and the Advisory Group (AG), Consultant hired. Local Coordinator and local experts recruited	Develop a document with quantitative measurements of reductions in GHG emissions from the selected Mitigation Policies (MP), the impacts of these MP in local Gross Domestic Product (GDP), employment and per capita income and amount of funds to finance new MP.
1.5.03	Initiate Phase 2 of the State Climate Action Plan for Tamaulipas (PEAC): Quantification of the mitigation public policies selected in Phase 1.	Tamaulipas State Government and BECC	$151,000	BECC	Tomás Balarezo, BECC	State strategy work is redesigned. CICC is installed. Integrated Technical Working Groups (TWG) and the Advisory Group (AG). Consultant hired	Develop a document of Selected Mitigation Policies through an open and participatory process.
1.5.04	Research the potential for harnessing wind power for electricity in Tamaulipas.	SEMARNAT and SEDUMA		SEMARNAT will seek funds	Delfino.ramirez@semarnat.tamaulipas.gob.mx	Conduct research and explore business opportunities	A forum was held in October 2012. No information available since then.
Comment: This forum was replicated by SEDUMA in November 2012 and have 26 projects in process							
1.5.05	Research the potential for harnessing wind power for electricity generation in Nuevo León.	Secretaría de Desarrollo Sustentable de Nuevo León	$10,000	Mexican federal funds/CONACYT	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com	Establish wind monitors in selected areas of the state by the end of 2013, and begin generating wind maps in 2014.	SDS continues to search for funding.
1.5.06	Construct and operate a facility that extracts methane gas from the Nuevo	Municipio de Nuevo Laredo and Setasa	$3.5 million	Private sector; a company	Sergio Martínez López	Have the facility in full operation by the end of	A feasibility study was completed 2008 with

	Laredo landfill and burns it to generate electricity for the municipality.	(Servicios de Tecnología Ambiental S.A.)		will be selected and then will build and operate the plant, selling the electricity to CFE and giving a portion of revenues from carbon credits to the municipio.	sergiomartinezlopez@hotmail.com	2014.	funding from USAID. Issuance of a tender for construction is pending (the municipio needs to obtain the property title).
Comment: The project is suspended							
1.5.07	Implement a pilot program to diagnose the existing Mexican fleet of heavy-duty commercial trucks in cross-border trade in the Laredo -Nuevo Laredo area, identify retrofit technologies that would reduce emissions, and share information on those technologies, their costs, and suppliers at a binational forum.	SEMARNAT and the Municipio of Nuevo Laredo	$50,000	EPA border grant through the BECC	Ing. Eduardo Olivares (SEMARNAT-Clean Transportation Program), eduardo.olivares@semarnat.gob.mx, and Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology Program), valencia_osvaldo@hotmail.com	Complete the project by the end of 2013.	The final report Generated information to raise awareness to the transportation companies on the issue of emissions of diesel. Information of 2,756 trucks and 456 companies had. 50% of the sample trucks are 2000 or earlier model, the trucks are aged over 13 years, and 84% are 2006 model or earlier, aged 7 years or more.
1.5.08	Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	SEMA (Coahuila), Municipio de Piedras Negras, Acuña, Nava, Sabinas, Saltillo	1,400,000	SEMA Coahuila	Miguel Ángel Leal Reyes (SEMA Coahuila) miguel.reyes@sema.ob.mx	Have air quality monitoring network in operation for Piedras Negras-Nava Region, Acuña, Sabinas Region and Saltillo Region, Coahuila	SEMA has begun working with local officials to include these projects in the plans of the applicable "Metropolitan Zones".
1.5.09	Apply retrofit technologies to public buildings in Piedras Negras and Acuña, Coahuila that will reduce energy consumption.	SEMA (Coahuila), Municipio de Piedras Negras y Municipio de Acuña	$500,000	SEMA Coahuila	Olga Rumayor (SEMA Coahuila) olga.rumayor@sema.gob.mx	Involve municipal agencies through a series of workshops and select at least 10	The project is still in the planning phase, and will be proposed to the BECC to obtain support.

						buildings to pilot retrofit technologies.	
1.5.10	Design and implement vehicle emission verification programs or campaigns in Tamaulipas.	SEDUMA	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas seduma@tamaulipas	Have vehicle verification program in the border area of the state by end of 2014	Pilot program focused on the state-owned fleet was initiated in early 2013.
Comment: Pending its implementation, possible start in early 2015							
1.5.11	Promote and encourage the use and exploitation of renewable energy sources and alternative energy potential in Tamaulipas.	SEDUMA	To be defined	SEDUMA/ SEMARNAT	Ing. Humberto Rene Salinas seduma@tamaulipas .gob.mx	Prepare action plan for nine wind power projects and state's strategic energy program	Baseline information is being collected.
Comment: SEDUMA has a demonstration project and currently have 26 projects in process							
1.5.12	Strengthen Tamaulipas' atmospheric monitoring system.	SEDUMA	Por definirse	SEDUMA/ EPA/COCEF	Ing. Humberto Rene Salinas seduma@tamaulipas .gob.mx	By 2014, the system will operate at 100% with programmatic consistency standards	8 municipalities of the State and have the equipment for air monitoring of PM10 (Matamoros, Reynosa, Laredo Nvo, Victoria, Mante, Tampico, Madero and Altamira). Currently only 3 of these eight municipalities are operating the system of air monitoring (Nvo Laredo, Victoria, Tampico)
1.5.13	Implementation of a environmental management system as a strategy for energy efficiency in Tamaulipas.	SEDUMA/Municipios	$ 100,000	SEDUMA/ EPA/COCEF	Ing. Humberto Rene Salinas seduma@tamaulipas .gob.mx	By 2014, train in collaboration with ICLEI and INECC 100% of the border municipalities	State trained 16 municipalities from the border region and the San Fernando Valley region, with an attendance of approximately 100 people, the workshop was held in Reynosa.

Goal # 2: Improve Access to Clean and Safe Water

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
General							
2.0.01	Build and begin operation of a desalination plant in Nuevo León, using renewable energy as the energy source for the plant.	Servicios de Agua y Drenaje de Monterrey (SADM, Nuevo León's water utility)		SADM, BECC, and National Water Commission	Norma Rangel (SDS, Nuevo León), normaarangel@gmail.com y Carlos Avila, carlos.avila@sadm.gob.mx	Have the plant in operation by the end of 2014.	Project Canceled
Objective 2: Help drinking water and wastewater service providers in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.							
2.2.04	Conduct training for small businesses in the Reynosa area on best practices related to discharges of fats, oils, and grease (will include before and after measures).	Municipio of Reynosa	$16,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798, ecologiareynosa@hotmail.com	Organize a workshop or training event(s).	Project canceled.
2.2.06 (Sub-Obj. 3a)	Implement a binational Lower Rio Grande Water Quality Initiative (from Falcon to the Gulf) that characterizes the state of the river, develops a strategic plan to improve environmental conditions, and proposes a monitoring plan to document progress.	TCEQ, EPA, IBWC, CONAGUA, and federal, state, and local government agencies		TCEQ, EPA, IBWC, and federal, state, and local government agencies	Kelly Holligan (TCEQ), 512-239-2369, Kelly.holligan@tceq.texas.gov	Establish the collaborative partnership by early 2013, and make substantive progress on objectives by the end of 2014.	Terms of reference were developed that serve as the framework used by participating entities in the collaboration. In February and July 2013, TCEQ hosted training sessions on water quality modeling software (QUAL-TX and LAQUAL) for Mexican agency and EPA staff.
2.2.07 (Sub-obj. 2b)	Install/upgrade new sewer lines connected to Nuevo Laredo's wastewater treatment plant to prevent contaminated discharges to the Rio Grande.	COMAPA and Municipio de Nuevo Laredo	$5,000,000	North American Development Bank (NADB)	Claudia López Aguilar (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) claudialopez@comapan	Complete the project by December 2014.	BECC certified the project in September 2012. COMAPA will complete the construction of four sewer collectors to the

					uevolaredo.gob.mx New Manager CP Delfino González Muñoz Tel: 867-8900900 dgcdelfino@hotmail.com dianarigal@comapanuevolaredo.gob.mx		wastewater treatment plant by August 2013 and will work with CONAGUA on securing funding to address sewer discharges (about 280,000 GD) from La Joya Creek to the Rio Grande. COMAPA and the municipio are in the process of signing an agreement with the property owner to allow crews to repair the discharge point from La Joya creek since it is on private property. Along with this effluent discharge, COMAPA has identified five discharge points. Here is a breakdown on the work being conducted on these collectors: More than 230,000 gallons per day from the 5 de febrero collector have been eliminated and 40% of the repairs have been completed for the second phase 90% of the work to repair the Guatemala collector has been finished. The total amount (420,000 GD) that is currently discharging should be eliminated by May 2014 Work is underway to rehabilitate the America,

							Anahuac and Iturbide collectors, which are discharging about 1.2 MGD. All sewer discharges should be eliminated by November 2014.
Comment: Conclusion of activities in January 2015, in March 2015 the IBWC conduct a monitoring water quality of the river							
Objective 3: Work binationally to identify and reduce surface water contamination in transboundary waterbodies or watersheds.							
2.3.02	Conduct feasibility studies for wastewater treatment plants in the municipalities of Hidalgo and Guerrero, Coahuila.	CEAS Coahuila, SEMA Coahuila	$15,000	CNA, Coahuila	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Complete the studies by early 2014	CEAS has completed the feasibility studies and is making efforts to implement water management programs in those municipalities.
2.3.03	Design and implement local public conservation campaigns and land conservation agreements for Rio San Rodrigo and Arroyo Las Vacas.	SEMA Coahuila, Municipio de Piedras Negras and Municipio de Acuña	$400,000	Coahuila will fund first part and will be seeking funding for the rest	Alejandra Carrera (SEMA Coahuila), alejandra.carrera@sema.gob.mx	Begin implementing the campaigns and conclude the land conservation agreements by the end of 2014.	SEMA obtained funding from the EPA through the BECC in November 2013 to restore and conserve the Arroyo Las Vacas. SEMA has developed partnerships with TCEQ, Ciudad Acuña, local academic institutions, and UT Austin, and is finalizing the workplan. The project will promote awareness and take actions to improve the ecosystem of the arroyo.
2.3.04	Implement a program to remove invasive plants in the Rio Grande.	SEMA Coahuila, CONANP, Profauna	$85,000	SEMA Coahuila, CONANP, Profauna –	Alejandra Carrera (SEMA Coahuila) alejandra.carrera@sema.gob.mx	By the end of 2014, increase the invasive species plant removal program in the Rio	No progress yet.

				and will seek other funding sources		Grande.	

Goal # 3: Promote Materials Management, Waste Management and Clean Sites

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
3.1.01	Link and promote the Mexican federal program "Green Schools" in all three Mexican states in the region and explore possible use in Texas.	SEMARNAT/Tamaulipas and state agencies in Tamaulipas, Nuevo León, and Coahuila	??	SEMARNAT	Delfino Ramirez (SEMARNAT/Tamaulipas), Delfino.ramirez@semarnat.tamaulipas.gob.mx	Reach 150 schools in the 3 Mexican States by July 2013. Hold an information exchange meeting w/Texas 2014	Program very successful in Tamaulipas--135 schools are registered in the Green School Program, of which 33 are in Nuevo Laredo, 50 in Reynosa and 9 in Matamoros. Information not available from other states.
Comment: The program was completed in the 2012-2013 school year. This program was replicated by SEDUMA. The new strategy is called by SEDUMA SIMAE (School Environmental Management System) under the principles of Green School.							
3.1.04	Establish an environmental organization to develop environmental awareness and clean-up programs in Nuevo Laredo.	Keep Laredo Beautiful, Keep America Beautiful, and the Municipio de Nuevo Laredo	$5,000	The Gateway Rotary Club and Keep America Beautiful	Ing. Marco Antonio Garza Delgado y Lic. María Guadalupe Herrera Rodríguez U.T. (Programa Zona Verde, Nuevo Laredo) Lynne Nava (Keep Laredo Beautiful), lnava1@ci.laredo.tx.us	Recruit reps of non-profit organizations and school officials as members of a board of directors in 2013.	No progress toward target as of July 2013.
3.1.07	Expand a municipal recycling program started in March 2012 in Nuevo Laredo and currently consisting of placing public	Municipio de Nuevo Laredo	???	Municipio de Nuevo Laredo	Osvaldo Valencia (Municipio de Nuevo Laredo—Ecology	Install the bins at all elementary schools in 2013 and start	Environmental education conferences were resumed at city

	bins in parks, to include all elementary schools in Nuevo Laredo.				Program) valencia_osvaldo@hotmail.com	relevant environmental education programs for students.	elementary schools in February 2013.
Comment: The program was completed.							
3.1.08	Extend Tamaulipas' environmental management system program (SIMA) to private institutions, schools, and shops.	SEDUMA	$ 300,000	EPA/SEDUMA/SEMARNAT	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	Reach out to 100% of the border cities	The SIMA Program has been implemented in 30 schools in the municipality of Matamoros. State has invested 1 million 800 thousand pesos for replacement of furniture and equipment of high efficiency consumption of water and energy, clean energy production, waste recycling, rainwater collection and environmental education workshops. In the 2nd half of 2014 will support equipment (containers for medical waste and saving features) at 2 participants SIMA schools.
3.1.09	Redesign and extend coverage of the E-conexion Newsletter as strategy to share best practices.	SEDUMA	$ 30,000	SEDUMA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Extend the dissemination of the E-Conexion to 100% of the Tamaulipas municipalities	Activity in process
Comment: The edition of the newsletter is every three months.							
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.							

3.2.01	Build capacity in scrap-tire management throughout the region.	Sustainable Development Secretariat, State of Nuevo León	$35,000	EPA border grant through the BECC	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com	Prepare a "best practices" manual and perhaps hold a regional workshop	Tire manual for tire recollection center
3.2.02	Use organic waste generated in Sabinas Hidalgo, Nuevo León to make compost and then apply it to agricultural uses and urban gardening.	Sustainable Development Secretariat, SEMARNAT-Municipio of Sabinas Hidalgo, Nuevo León	Mexican federal funds $67,000	Municipio of Sabinas Hidalgo Nuevo León	Norma Rangel Sevilla (SDS, Nuevo León), normaarangel@gmail.com y chel1977@live.com.mx	By the end of 2014, compost 100% of organic waste collected by the municipality from large waste generators.	Project canceled
3.2.04	Develop a composting operation in Nuevo Laredo using sludge from the wastewater treatment plant and yard wastes, and apply the product in municipal parks as well as in homes (through sales to homeowners).	COMAPA and Municipio de Nuevo Laredo	$30,000 ¿?	Municipio de Nuevo Laredo	Carlos Montiel Saeb (Comisión Municipal de Agua Potable y Alcantarillado—COMAPA) carlosmontielsaeb@hotmail.com	The program, including applications and sales, is expected to be in full operation by sometime in 2013.	Currently the compost is being applied to the germination of seeds and vegetables in the greenhouse of the municipio's Research and Environmental Education Center.
3.2.05	Implement a collection program for used electronic products in Reynosa, Tamaulipas.	Municipio of Reynosa	$30,000	EPA border grant through the BECC	Mauricio Chalons (Municipio of Reynosa), 899 263-3798 ecologiareynosa@hotmail.com	Promote sustainable routes to properly manage waste streams generated by electronic waste in Reynosa, Tamaulipas	Project completed by the end of 2013. The city collected about 27.7 tons of e-waste and sent for recycling.
3.2.06	Design and implement a state scrap tire management program that includes valuation.	SEDUMA	$ 400,000	SEDUMA/SEMARTANT/EPA	Ing. Humberto Rene Salinas (SEDUMA), seduma@tamaulipas.gob.mx	Develop public policy and management plan for scrap tires	No progress on the project
3.2.07	Evaluate and take advantage of energy potential of waste in Matamoros landfills.	SEDUMA	$ 300,000	SEDUMA/EPA	Ing. Humberto Rene Salinas seduma@tamaulipas.gob.mx	Complete action plan	No progress on the project

Objective 3: By 2020, improve knowledge in every level of government (federal, state, local) to characterize and remediate contaminated sites.							
3.3.01	Complete the remediation of old oxidation lagoons.	Municipio de Piedras Negras and State of Coahuila environmental agency (SEMA)	$300,000	State of Coahuila environmental agency (SEMA)	Alfredo Lucero (Piedras Negras), aalm68@hotmail.com	Complete the remediation of the remaining 10.3 acres by the end of 2013, after which the municipality will develop a road extension to and a green area at the site.	Prior to 2012, 19.7 acres of the 30-acre site had been remediated. No new information available.
3.3.03	Establish a sustainable management plan for scrap tires in Piedras Negras, Coahuila.	SEMA, Municipio de Piedras Negras	$400,000	¿?	Miguel Angel Leal (miguel.leal@sema.gob.mx)	Develop plan and place in full operation by the end of 2014	SEMA determined they need to perform a feasibility study on using coal pits as disposal sites for scrap tires.

Goal #4: Enhance Joint Preparedness for Environmental Response

Project #	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact	2013-2014 Target	Progress Towards Target
Objective 2: By 2020, at least eight (8) of the sister city joint contingency plans will be supplemented with preparedness and prevention related activities such as certified training, risk analysis, and/or capacity building.							
4.2.01	Develop an emergency response plan for the maquiladoras in Brecha E-99 in Reynosa,Tamaulipas.	CAMPIR (Comite de Ayuda Mutua del Parque Industrial Reynosa) (Reynosa Industrial Park Mutual Aid Committee)	$10,000	EPA border grant through the BECC	Dr. Emilio Sonderegger Arriola emilio.sonderegger@landisgyr.com	???	Project canceled.

4.2.03	Hold a binational chemical-spill exercise at the World Trade Bridge between Nuevo Laredo, Tamaulipas and Laredo, Texas.	Civil Protection and Fire Department of Nuevo Laredo, Tamps., and the City of Laredo Fire Department	$5,000	EPA border grant through the BECC	Lic. Juan Ernesto Rivera Gómez (Civil Protección de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com or ernestorivera5775@hotmail.com New Manager: Ing. Juan Ulises Ochoa Correa jochoa@nuevolaredo.gob.mx juan.u8a@hotmail.com Tel: 867-7124635 867-7128911	Hold the exercise after the Mexican federal government has approved a permit that allows hazardous waste to be transported on this bridge.	The U.S. Department of State issued a "presidential permit" in May 2014 for the use of the bridge for transport of hazardous materials, but the Mexican government is awaiting the completion of a flow study that CONAGUA is conducting in the Rio Grande before issuing its permit. If and when a Mexican permit is issued, local officials will organize a binational exercise. Still waiting for a date to finish this study and define next steps
4.2.04	Develop a cross-border contingency plan for the Solidarity Bridge, involving first responders from Colombia (Nuevo León), Nuevo Laredo (Tamaulipas), and Laredo (Texas), recognizing that Colombia, upstream from the other two cities, is much smaller and yet shipments of hazardous materials in the area are currently directed to this bridge.	Civil Protección and fire departments for both Colombia and Nuevo Laredo, CODEFRONT, and the City of Laredo	$5,000 -	EPA, COCEF, PROFEPA, and Protección Civil	Jorge Camacho (Protección Civil de Nuevo León) jorge.camacho@nueveoleon.gob.mx New officer: Juan Ulises Ochoa Correa jochoa@nuevolaredo.gob.mx juan.u8a@hotmail.com Tel: 867-712-4635 867-7128911	The objective of this training was to perform a simulation in the World Trade International Bridge (Bridge III) as part of the training staff of Civil Protection in response to contingencies, taking into account that this port is in the process of authorization to cross hazardous materials eventhoug it already has the infrastructure to handle these materials.	Pending approval by the Government of Mexico to cross hazardous materials. Part of the process is to wait for a water quality analysis performed by CONAGUA. In reality the materials cross by the Colombia Bridge in Nuevo Leon, but do not have the civil protection resources. In the case of an event, the assistance comes from Nuevo Laredo. Once the permit is released the drill can takes place.

4.2.05	Finish updating the 1998 Cross-Border Contingency Plan between the sister cities of Laredo, Texas and Nuevo Laredo, Tamaulipas, in order to improve emergency response communication and protocols.	Laredo Fire Department, Protección Civil de Nuevo Laredo, and CILA	No cost	City of Laredo and Nuevo Laredo	Eloy Vega (City of Laredo Fire Department), evega@ci.laredo.tx.us Ernesto Rivera (Protección Civil de Nuevo Laredo), proteccioncivilnuevolaredo@hotmail.com	Hold new meetings of the staff of the two cities in 2013 in order to re-visit the language of the draft revision and possibly develop alternative language.	Laredo officials met in May 2013 to make changes to one sentence in a draft of the new cross-border contingency plan that had been originally prepared in 2009. The changes were intended to clarify that Laredo could not send personnel across the border, because of security and liability concerns, but could assist in other ways. The revised agreement was been approved subsequently by Nuevo Laredo, but has been awaiting action by the Laredo City Council since that time.
4.2.06	Update and improve the cross-border contingency plans for emergency response for the sister-city pairs of (a) Eagle Pass, Texas and Piedras Negras, Coahuila and (b) Del Rio, Texas and Ciudad Acuna, Coahuila, which will include risk analysis and development of risk maps.	City of Eagle Pass, Municipio de Piedras Negras, City of Del Rio, Municipio de Ciudad Acuña, BECC, and the Rio Grande Institute	$130,000	EPA border grant through the BECC	Briselda Duarte (Border Environment Cooperation Commission), bduarte@cocef.org and M.C. Mónica de Jesús Pérez Morales (Consultoría y Servicios en Seguridad Industrial y Medio Ambiente, S.A. de C.V.)	Complete new plans by the end of 2013.	The project was completed by the end of 2013. Under contract from the BECC, two workshops were organized in the first half of 2012 for staff from the two pairs of sister cities to discuss protocols and risks. After delays and the hiring of a new contractor, additional workshops were held in July 2013. In November of that year, the two sister-city pairs each signed a Memorandum

							of Cooperation for new cross-border contingency plans. Each community committed to providing resources and mutual aid in case of chemical accidents.

R6 Texas- Coahuila-Nuevo Leon- Tamaluipas (4-State) Regional Workgroup (RWG)
Summary of Border 2020 Key Accomplishments and Priorities for the 2015-2016 period

This region is very large geographically—the border for this part of Texas and the adjoining states of Coahuila, Nuevo León and Tamaulipas is 806 miles, or 1,296 kilometers, long—and includes a significant number of municipalities

The Four-State Regional Workgroup has six co-chairs. Because of this size, the task forces are geographical sub-regions: "Amistad, Falcón, and Gulf" and each of those task forces in turn has committees tied to the Border 2020 goals that are most important to each task force.

The Texas Commission on Environmental Quality (TCEQ) leads on organizing task force and committee meetings, with collaboration from a Mexican liaison for the Four-State Region who is funded by EPA, and supported by R6EPA Border Team,

Two years ago, in August 2014 the 4-state RWG and several of its six co-chairs held a senior executive leadership meeting in San Antonio, TX followed by the RWG annual public meeting held in July 2014 in San Antonio, TX.

Of the 60 projects on the B2020 Action Plan, 28 have been completed, a 47% accomplishment. 12 of them are in progress, 12 are on hold, 8 have been cancelled.

Of the various Goal's, a few of the 4-state accomplishments include:

- In the area of **Air Quality**, in the Municipio of Nuevo Laredo, SEMARNAT and Tamaulipas' Environmental Secretariat (SEDUMA,) worked on a diagnosis of heavy duty commercial trucks involved in cross-border trade, identified retrofit technologies that would reduce emissions, and along with TAMU-TTI carried out a workshop on "Transporte Limpio" aimed at driver to reduce usage of diesel and eco-friendly driving,
- SEDUMA – Tamaulipas, held an energy efficiency workshop at which more than 100 staff persons from 16 Municipios were trained and received a hands on experience.

- In the area of **Water Quality**, The City of Laredo organized regional workshops on water conservation and on management of fats, oils, and grease. In collaboration with a state legislator, the TCEQ have organized "Annual Water Awareness Summits" in 2013 and 2014 in the Lower Rio Grande Valley, both attracting more than 200 participants,
- At border cities in Tamaulipas' wastewater and drinking water facilities "Energy Audits" have been carried out.

- In the area of **Materials and Waste Management**, the Secretariat for Sustainable Development of Nuevo León surveyed municipalities on both sides of the border regarding management of scrap tires and developed a list of "best practices". This report was published in Spanish,
- In Tamaulipas, following the guide of Nuevo Laredo experience, border communities have implemented a program for receiving "household's hazardous and electronic waste.

- In the area of **Enhanced Joint Preparedness and Response**, existing sister-city contingency plans were updated for both Eagle Pass-Piedras Negras and Del Rio-Ciudad Acuna,

Commented [RC1]:

- In celebration of Binational Health week, the University of Texas Health Science Center at San Antonio designed and implemented a binational project that trained 20 promotoras from Texas and 20 promotoras from Tamaulipas to work with families on reducing environmental exposures experienced by two vulnerable populations — expectant mothers and very young children

A summary of priorities and emerging issues to be addressed in the 2015-2016 action plans:

- Regarding 2015-2016 priorities, committee meetings are scheduled in the fall in our task force areas:
  - Goal 1: Continue the development of vehicle inspection programs in Mexican border municipios,
  - At US-Mexico's Port of Entry where used vehicles are being imported into Mexico, implement Mexico's environmental law's requirement for vehicles to comply with vehicle emissions regulations,

  - Goal 2: Improve Drinking and Wastewater treatment facilities' operation and increase their service coverage, while eliminating raw discharges to the Rio Grande,
  - Continue the binational water quality initiative in the Lower Rio Grande, an explicit Border 2020 objective,

  - Goal 3: Build on efforts the past two years to encourage "best practices" in scrap tire management, promoting the implementation of regulations set by the State of TX to control and mange scrap tires at the point of generation,
  - Improve infrastructure, management and operation of disposal and transfer sites for municipal solid waste,

  - Goal 4: Overcome roadblocks to developing better joint contingency plans and holding simulation exercises in the Laredo-Nuevo Laredo area,
  - Update the Emergency Response Plans that remain pending at border communities,

  - Goal 6: Promote training and improve professional profile of enforcement officials for environmental compliance at the three levels of government, aimed to strengthening the legal enforcement,
  - Encourage additional projects related to public education on environmental health topics

In the past year through statements and presentations by the public at that RWG meeting by Texas and Tamaulipas officials; concerns and pressuring issues caused by shale gas and oil development confirmed it's of great importance and a very hot topic

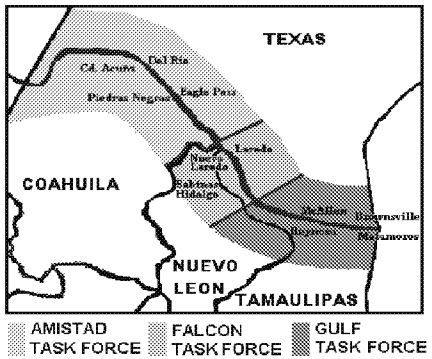
It should be noted that: 15 years ago the border program (Border XXI at that time) was run mostly out of Mexico City and Washington and Dallas and San Francisco, and the federal governments were being criticized by local communities. Now, we have local communities deciding and implementing their priorities and projects and telling the federal governments what they are accomplishing.

BORDER 2020

2017-2018 Amistad Task Force Action Plan

TX-COAH-TAMP-NL Regional Workgroup

October 2017



The Four-State Regional Workgroup is the most complex of the four regional workgroups because of its geographical extension and the number of municipalities. The region includes parts of three states and at least 29 municipalities on the Mexican side and 168 cities and towns on the U.S. side. Recognizing this, the workgroup divided itself into three geographically-based Task Forces—Amistad, Falcon, and Gulf--each of which established subject-specific committees related to its priority concerns.

Border 2020 has five goals and the regional work groups propose projects to implement these goals. These projects are tracked in two-year revolving work plans. The 2017-2018 version is the second of its kind. Several projects have been carried over from the 2015-2016 Action Plan. Due to consensus by the Four State Workgroup, a sixth goal for health and education projects was included. Projects are organized by Border 2020 goals and objectives.

In October of 2016, the three task forces held meetings to discuss initial priorities for the 2017-2018 Action Plan as well as several conference calls with leaders to develop a consensus of priorities at the local and regional workgroup levels.

Regional Priorities

Goal 1: Reduce Air Pollution

a) Implement atmospheric monitoring programs under the same criteria of analysis and promote the dissemination of results in the four states
b) Set actions in accordance with the public policies of micro and macro-economic analysis of climate change state programs
c) Promote the implementation of the PROAIRE air quality program and its strategies in the border communities

Goal 2: Improve Access to Clean and Safe Water

a) Continue to improve energy efficiency for water operators in border municipalities
b) Continue the water conservation programs and encourage the reuse of treated water for irrigation
c) Strengthen wastewater sanitation programs and actions
d) Disseminate green infrastructure actions for sustainable development of border communities
e) Promote strategies for adequate wastewater management in Tamaulipas border municipalities

Goal 3: Promote Materials Management and Waste Management, and Clean Sites

a) Increase institutional capacity at the local and state levels for sustainable practices in solid waste management
b) Develop collection and comprehensive waste management programs for used electronics for municipalities in the border area

c) Develop collection and comprehensive waste management programs for proper disposal of household hazardous waste for municipalities in the border area
d) Continue efforts to implement comprehensive scrap tire management programs
e) Strengthen operations of the sanitary landfills in border municipalities, with plans to capture and take advantage of the biogas and convert to energy
f) Develop comprehensive actions to eliminate unauthorized open-air dump sites
g) Encourage municipal programs for holistic waste management
h) Promote the integral waste management in the Mexican municipalities

Goal 4: Enhance Joint Preparedness for Environmental Response

a) Continue the binational relationship in emergency response for training, equipment and drills
b) Promote the creation of risk atlases for waste management and hazardous materials in border communities
c) Carry out the required border studies for the protection of local communities
d) Generate a diagnosis of equipment, training, and ability to respond to an emergency in border municipalities

Goal 5: Enhance Compliance Assurance and Environmental Stewardship

a) Implement binational workshops targeted to environmental enforcement professionals, including ports-of-entry customs professionals, to promote the exchange of information and improve understanding of each country's respective compliance and enforcement programs
b) Promote the updating, sharing and application of municipal environmental regulations in border communities
c) Carry out the land management plans in the states and municipalities along the border region
d) Establish regulatory and operational mechanisms for the control of wild hogs

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

a) Develop a study that identifies the five top main risks on environmental health in border communities

Fundamental Strategies

a) Promote actions and environmental education programs on waste, recycling, water and fauna in the Kickapoo reservation
b) Implement a study related to the handling and disposal of used accumulators and their impact on public health
c) Establish a binational bilingual program for education purposes on environmental and public health topics according to regional priorities.

Amistad Task Force

Goal 1: Reduce Air Pollution

1. Establish and strengthen vehicle emissions programs in Acuña, Piedras Negras and Nava
2. Promote initiatives to develop energy efficiency and reforestation programs in the industrial sector in Acuña and Piedras Negras
3. Promote the implementation of strategies by the SEMARNAT PRO AIRE air quality program in Acuña, Piedras Negras and Nava

Goal 2: Improve Access to Clean and Safe Water

1. Conduct water quality monitoring of tributaries along the Rio Grande in Acuña and Piedras Negras
2. Develop Fats, Oils and Grease (FOG) workshops in Acuña and Piedras Negras, replicating the model in Laredo

3. Promote and develop green infrastructure projects and water conservation programs in Acuña and Piedras Negras

Goal 3: Promote Materials Management, Waste Management and Clean Sites

1. Promote the implementation of integrated solid, household hazardous waste and used electronic programs in Acuña and Piedras Negras
2. Strengthen scrap tire management programs and promote scrap tire reuse for projects in Acuña and Piedras Negras
3. Promote initiatives to develop plastic bag reduction programs in Acuña and Piedras Negras

Goal 4: Enhance Joint Preparedness for Environmental Response

1. Update the directory of emergency response personnel in the Acuña-Del Rio and Eagle Pass-Piedras Negras and develop a knowledge exchange workshop in Eagle Pass
2. Coordinate two emergency response tabletop exercises and joint response drills between Eagle Pass and Piedras Negras and Del Rio and Acuña

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

1. Develop awareness programs on vector borne illnesses such as Zika and Dengue virus in Acuña and Piedras Negras
2. Launch a binational environmental education program on recycling, energy efficiency and water conservation in Eagle Pass and Piedras Negras using social and broadcast media

GOAL # 1: Reduce Air Pollution

Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of Funding	Contact(s)	Objective 2017-2018	Status Complete; Continuing; Ongoing; New for 2017	Progress Towards
1.5.01	**Coahuila Climate Action Plan** Initiate Phase 2 of the State Climate Action Plan (PEAC, in Spanish) for Coahuila: quantification of mitigation policies selected in Phase 1.	Coahuila State Government and BECC	$275,000	BECC	Tomás Balarezo, BECC, tbalarezo@cocef.org	Organize meetings with the technical work groups, the advisory group, and the Climate Change Committee.		The project is currently in the Microec Phase for Coahuila. Meetings have bee Working Groups, the Advisory Group, Committee. The Action Plan is ready a being published in the Official Journal
1.5.02	**Air Quality Network in Coahuila**	SEMA (Coahuila), Municipalities of Piedras Negras, Acuña,	12 Million Pesos	SEMARNAT	Santiago Barrios, SEMA/Coahuila, santiago.barrios@sema.gob.mx	Initiate the project. It is currently in the review phase prior to bidding.		The project has been authorized and is prior to bidding. Three air monitoring and have been operating for a year.

	Establish an air quality monitoring network in the areas of Piedras Negras-Nava, Acuña, Sabinas, and Saltillo, Coahuila.	Nava, Sabinas, Saltillo						

Goal # 3: Promote Materials Management, Waste Management, and Clean Sites

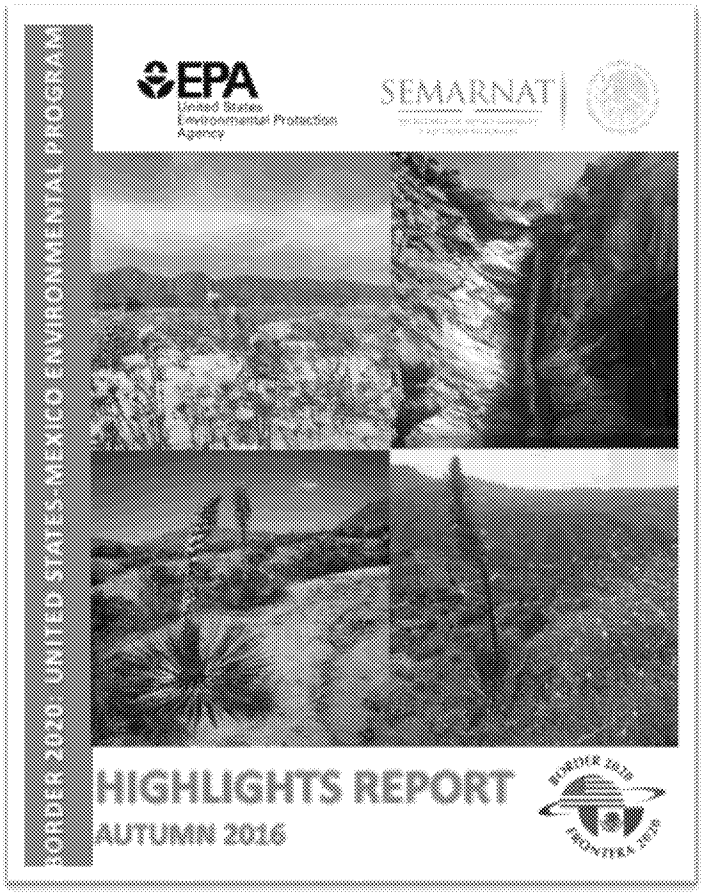
Project N°	Description of Project	Collaborating Organizations	Anticipated Cost	Source(s) of funding	Points of Contact(s)	Objective 2017-2018	Progress Towards Target
Objective 1: By 2020, increase local and state-level knowledge and experience in the area of sustainable material management practices.							
*3.1.03	**Construction of and Equipment for Type A Landfill in the Coal Deposit Region**	SEMA, SEMARNAT, Municipalities of Múzquiz and Sabinas	25 Millones Pesos	SEMARNAT PEF 2015	Oscar Flores, SEMA, oscar.flores@sema.gob.mx 01152844 698-1091 ext. 7268	Construction and operation.	Conduct soil studies. Under analysis prior to request for bids. The project is still in progress. The bidding process for the project ended and the technical studies are ready. The construction of the landfill started in September 2017.
*3.1.04	**Construction of and Equipment for a Regional Landfill in the Municipalities of Juárez and Progreso, Coahuila**	SEMA, Municipality of Juárez and Progreso	8 Millones Pesos	PEMEX Hydrocarbon Fund	Oscar Flores, SEMA, oscar.flores@sema.gob.mx 01152844 698-1091 ext.7268	Construction and operation.	Under analysis prior to request for bids. The project is still in progress. The construction of the landfill was completed. Municipalities will receive the equipment in September 2017.
*3.1.05	**Construction of and Equipment for Two Urban Solid Waste Transfer**	SEMA, Municipio de Múzquiz	8 Millones Pesos	PEMEX Hydrocarbon Fund	Oscar Flores,	Construction and operation.	Under analysis prior to request for bids. The project is still in

	Stations in the Municipality of Múzquiz, Coahuila				SEMA, oscar.flores@sema.gob.mx 01152844 698-1091 ext.7268		progress. The transfer stations are currently in the bidding process for funds, and will be installed after the construction of a landfill in the coal region
3.1.06	**RECOLECTRÓN Program** Collection program for used electronics in the municipalities. Inform and educate the population of the benefits of reusing used electronic products.	SEMA, Municipalities of Acuña, Allende, Nava and Sabinas	2 Million Pesos $16,777	SEMA Border 2020	Griselda Salas Alemán, SEMA, griselda.salas@sema.gob.mx Oscar Flores, SEMA, 01152844 698-10-91 ext.7268 oscar.flores@sema.gob.mx	Continue collecting tons of waste. Conduct an assessment as well as training of municipal ecology staff on used electronics and implement actions for adequate disposal.	To date 44.89 tons has been collected. More than 442 tons of used electronics was collected, surpassing the goal of 259 tons that was set by the current six-year administration. The project is in progress.
3.1.07	**Responsible Disposal of Tires** Operation of a scrap tire disposal center. Using three slices, reduce the volume and risk of standing water, a breeding ground for mosquitoes (vectors for dengue fever).	Municipality of Acuña, Coahuila	$12,000	Municipio de Acuña, Coahuila	Biól. Carlos Alejandro Flores Diego, Director of Ecology, floresdiegocarlos@yahoo.com.mx 01152877 773-1458	Continue collecting tons of waste.	A regulatory framework regulates management and a program is underway for storage, but infrastructure is required for final disposal. . The municipio created a certification program for auto body shops and generators that manage scrap tires, which requires these establishments to cut the tires in three pieces to properly dispose them, and maintain their operating license. To date more than 58,000 tires were collected, mitigating about 95% of vectors. The project is in progress.
3.1.08		Municipality of	$12,500			Continue collecting and	The regulatory framework was approved by the city council as

	Disposal of Used Electronic and Hazardous Waste Create a storage center for the special management of waste, in which small generators can adequately dispose of items according to norms.	Acuña, Coahuila		Municipality of Acuña, Coahuila	Biól. Carlos Alejandro Flores Diego, Director de Ecología, floresdiegocarlos@yahoo.com.mx 01152877 773-1458	disposing of electronic and hazardous waste.	well as changes to municipal environmental regulations regarding an approval for an operating license for six months and certification of training workshops. . To date 29 tons of waste have been collected. The program is carried out in coordination with SEMA. The municipio made an agreement with Promotora Ambiental (PASA)—a waste services provider-- to pick up hazardous and electronic waste from generators in the community. PASA ships the waste to a storage facility in Piedras Negras and to a refinery for final disposal.
3.1.10	**Electronic Waste Recycling** Develop an educational campaign aimed at reducing used electronics by creating an integrated electronic waste recycling program and promoting sustainable practices.	Grupo Ecológico Green Tec-Osos del Instituto Tecnológico de Piedras Negras	$36,054	Border 2020	Ing. Víctor Ibarra, Instituto Tecnológico de Piedras Negras, ing_victor_m@prodigy.net.mx 01152878 135-0185	Conduct workshops and campaigns at schools and public events on used electronics.	Public events on used electronics were conducted in Piedras Negras, resulting in the collection of more than 15 tons in the collection centers that were installed by the municipio. The Technological Institute of Piedras Negras organized workshops and awareness campaigns on used electronics in more than 16 schools in Piedras Negras and Eagle Pass, training more than 103,500 residents on the proper management of used electronics, which resulted in the collection of more than 61 tons. The project ended in June.

*Projects that are not in the border area

Border 2020 Highlight Report



This report contains some highlights of the achievements and efforts of the Border 2020 Program during the last two years. We are pleased that during the last two years of work, thirty-five projects have been concluded to improve conditions facing border communities and eleven are in the implementation phase. These projects have addressed challenges of clean water, air quality, proper management of solid waste, environmental emergency response and environmental stewardship. Sixteen (16) Region 6 projects were highlighted in this report.

Texas-New Mexico-Chihuahua Regional Workgroup:

- Improving air quality monitoring in Ojinaga (Goal 1: Air)
- New Mexico-Chihuahua border study on air quality (Goal 1: Air)
- Urban keyhole gardens rainwater-harvesting techniques (El Paso Water Utilities) (Goal 2: Water)
- Bio solids recycling agriculture at Juárez valley (Goal 3: Waste)
- Tire amnesty collection events in El Paso County (Goal 3: Waste)
- Ysleta del Sur Pueblo Community Collection Center (Goal 3: Waste)
- Regional plan for waste management in Ascension and Janos (Goal 3: Waste)
- Hazardous railcar leak mitigation preparedness in the Paso del Norte region. (City of El Paso) (Goal 4: Emergency Response)

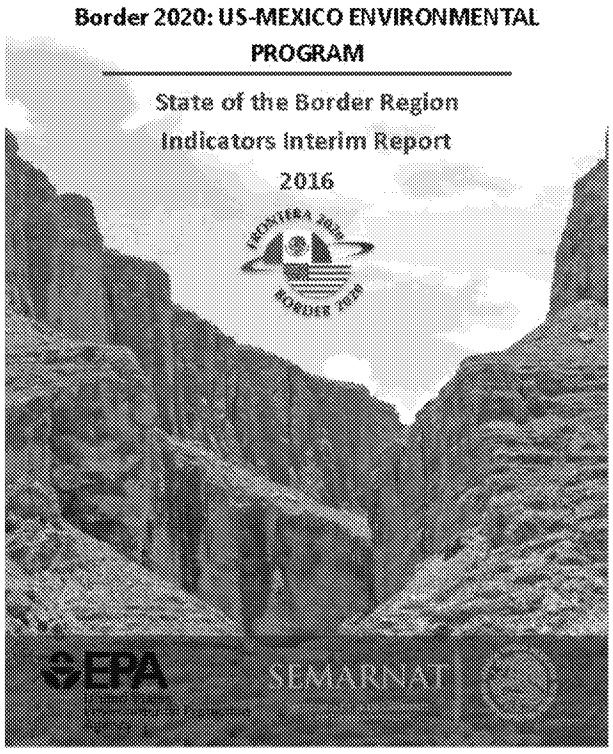
Texas-Coahuila-Nuevo León-Tamaulipas Regional Workgroup:

- Characterization of drayage vehicle activities and emissions in the Laredo air shed (Goal 1: Air)
- Management of fat, oil and grease in Nuevo Laredo (Goal 3: Waste)
- Conservation of the Arroyo Las Vacas in Acuña (Goal 3: Waste)
- Waste generation diagnostic for the Northeast Border Region (Goal 3: Waste)
- Alamo Recycling Team Includes Everyone (ARTIE) Program (Goal 3: Waste)
- Supporting Pharr efforts to maintain a clean community (Goal 3: Waste)
- Bi-national exercises at the cities of Harlingen and Matamoros (Goal 4: Emergency Response)
- Promotoras-led environmental health education to children in Eagle Pass (Environmental Education & Environmental Health)

Both Regions / Borderwide:

- COOPERATION TO IMPROVE ENVIRONMENTAL HEALTH (EPA – US/MX Border Health Commission Collaborative Agreement)
    - Children's Symposium (El Paso September 2015)
    - Promotora Trainings
- Enhance joint preparedness for environmental emergencies
- End-of-life Vehicles Guide
- United States-México Border Water Infrastructure Program.

State of the Border: Indicators Interim Report (2016)



The State of the Border Region 2016 Interim Report provides information on the status and trends of environmental quality in the U.S.-Mexico border region. In doing so, it also illustrates progress made under the U.S.-Mexico Border 2020 program.
This report builds on the flagship 2005 State of the Border Region report and the 2010 State of the Border Region report. It refreshes and updates key indicators from 2010 and adds new indicators to reflect new areas of Border 2020 focus and activity. As with previous reports, this report is structured around the goals of Border 2020 with chapters on air, water, land, environmental readiness and response, and enforcement and compliance.

Indicators are presented with brief data source information below each indicator. Complete underlying data and details on indicator data sources are available in a companion document, State of the Border Region 2016 Interim Update: Indicator Metadata and Data Tables.

Types of Indicators:

- ***Pressure:*** Indicators that describe human activities that place stresses on the environment.
- ***Need:*** Indicators that inform our understanding of the magnitude or type of need for a programmatic response.
- ***Output:*** Indicators that measure activities, products, or services resulting from a project or program.
- ***Outcome:*** Indicators that measure changes in the state of the environment or the effects of environmental conditions on human and/or ecological health

REPORT INDICATORS

Goal 1: Air

1. Number of Days Exceeding Air Quality Standards in Border Monitoring Areas

Goal 2: Water

1. Number of Unserved Homes Connected to Safe Drinking Water through the Border Water Infrastructure Program
2. Number of Unserved Homes Connected Wastewater Collection and Treatment Services through the Border Water Infrastructure Program

Goal 3: Waste

1. Per-Capita Municipal Solid Waste Disposal in U.S. Border States and Counties
2. Per-Capita Municipal Solid Waste Generated in Mexican Border States
3. Number of Electronics Refurbishers and Recyclers in the Border Region Certified to R2 or e-Stewards

Goal 4: Emergency Response & Preparedness

1. Number of Incident Notifications in the Border Region Received by the National Response Center (NRC)
2. Number of Incident Notifications in the Border Region Received by COATEA/CENACOM
3. Binational Capacity Building and Training Events

Goal 5: Compliance Assistance

1. Regulated U.S. and Mexico facilities in the border region
2. Number of State and Federal Inspections for Federal Programs in the U.S. Border Region
3. Number of Federal Inspections in the Mexican Border Region
4. Pollution Reduction from Federal Enforcement Actions in the U.S. Border Region

Goal 1: Reduce Air Pollution

- 4 Projects

Goal 2: Improve Access to Clean and Safe Water

- 6 Projects

Goal 3: Promote Materials Management, Waste Management, and Clean Sites

- 10 Projects

Goal 4: Enhance Joint Preparedness for Environmental Response

- 0 Projects

Goal 5: Compliance Assurance and Environmental Stewardship

- 0 Projects

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

- 2 Projects

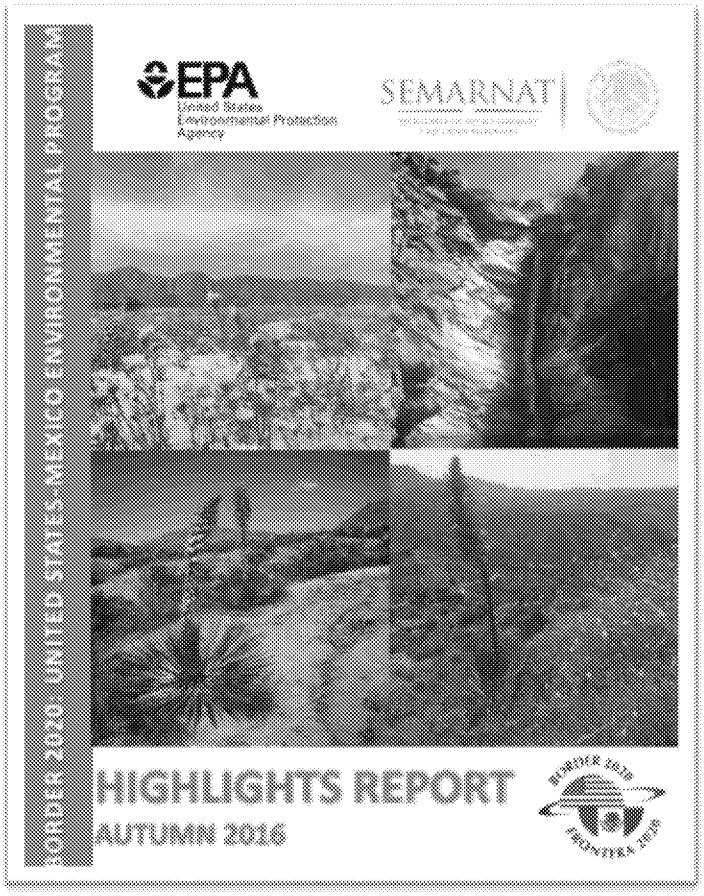
MORE INFORMATION (www.epa.gov/border2020):

OEJTIA Director
Arturo Blanco (blanco.arturo@epa.gov)
(214) 665-3182

Region 6 U.S.-Mexico Border Office Director
Carlos Rincon (rincon.carlos@epa.gov)
(915) 533-7273

Texas-Tamaulipas-Nuevo León-Coahuila Regional Workgroup Liaison
Japhet Cruz-Diaz cruz-diaz.japhet@epa.gov
(214) 665-3176

Border 2020 Highlight Report



This report contains some highlights of the achievements and efforts of the Border 2020 Program during the last two years. We are pleased that during the last two years of work, thirty-five projects have been concluded to improve conditions facing border communities and eleven are in the implementation phase. These projects have addressed challenges of clean water, air quality, proper management of solid waste, environmental emergency response and environmental stewardship. Sixteen (16) Region 6 projects were highlighted in this report.

Texas-New Mexico-Chihuahua Regional Workgroup:

- Improving air quality monitoring in Ojinaga (Goal 1: Air)
- New Mexico-Chihuahua border study on air quality (Goal 1: Air)
- Urban keyhole gardens rainwater-harvesting techniques (El Paso Water Utilities) (Goal 2: Water)
- Bio solids recycling agriculture at Juárez valley (Goal 3: Waste)
- Tire amnesty collection events in El Paso County (Goal 3: Waste)
- Ysleta del Sur Pueblo Community Collection Center (Goal 3: Waste)
- Regional plan for waste management in Ascension and Janos (Goal 3: Waste)
- Hazardous railcar leak mitigation preparedness in the Paso del Norte region. (City of El Paso) (Goal 4: Emergency Response)

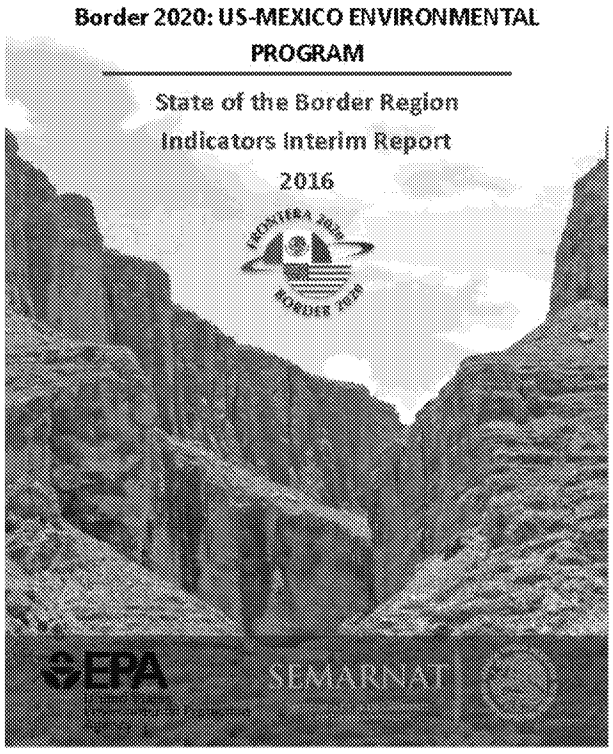
Texas-Coahuila-Nuevo León-Tamaulipas Regional Workgroup:

- Characterization of drayage vehicle activities and emissions in the Laredo air shed (Goal 1: Air)
- Management of fat, oil and grease in Nuevo Laredo (Goal 3: Waste)
- Conservation of the Arroyo Las Vacas in Acuña (Goal 3: Waste)
- Waste generation diagnostic for the Northeast Border Region (Goal 3: Waste)
- Alamo Recycling Team Includes Everyone (ARTIE) Program (Goal 3: Waste)
- Supporting Pharr efforts to maintain a clean community (Goal 3: Waste)
- Bi-national exercises at the cities of Harlingen and Matamoros (Goal 4: Emergency Response)
- Promotoras-led environmental health education to children in Eagle Pass (Environmental Education & Environmental Health)

Both Regions / Borderwide:

- COOPERATION TO IMPROVE ENVIRONMENTAL HEALTH (EPA – US/MX Border Health Commission Collaborative Agreement)
    - Children's Symposium (El Paso September 2015)
    - Promotora Trainings
- Enhance joint preparedness for environmental emergencies
- End-of-life Vehicles Guide
- United States-México Border Water Infrastructure Program.

State of the Border: Indicators Interim Report (2016)



The State of the Border Region 2016 Interim Report provides information on the status and trends of environmental quality in the U.S.-Mexico border region. In doing so, it also illustrates progress made under the U.S.-Mexico Border 2020 program.
This report builds on the flagship 2005 State of the Border Region report and the 2010 State of the Border Region report. It refreshes and updates key indicators from 2010 and adds new indicators to reflect new areas of Border 2020 focus and activity. As with previous reports, this report is structured around the goals of Border 2020 with chapters on air, water, land, environmental readiness and response, and enforcement and compliance.

Indicators are presented with brief data source information below each indicator. Complete underlying data and details on indicator data sources are available in a companion document, State of the Border Region 2016 Interim Update: Indicator Metadata and Data Tables.

Types of Indicators:

- ***Pressure:*** Indicators that describe human activities that place stresses on the environment.
- ***Need:*** Indicators that inform our understanding of the magnitude or type of need for a programmatic response.
- ***Output:*** Indicators that measure activities, products, or services resulting from a project or program.
- ***Outcome:*** Indicators that measure changes in the state of the environment or the effects of environmental conditions on human and/or ecological health

REPORT INDICATORS

Goal 1: Air

1. Number of Days Exceeding Air Quality Standards in Border Monitoring Areas

Goal 2: Water

1. Number of Unserved Homes Connected to Safe Drinking Water through the Border Water Infrastructure Program
2. Number of Unserved Homes Connected Wastewater Collection and Treatment Services through the Border Water Infrastructure Program

Goal 3: Waste

1. Per-Capita Municipal Solid Waste Disposal in U.S. Border States and Counties
2. Per-Capita Municipal Solid Waste Generated in Mexican Border States
3. Number of Electronics Refurbishers and Recyclers in the Border Region Certified to R2 or e-Stewards

Goal 4: Emergency Response & Preparedness

1. Number of Incident Notifications in the Border Region Received by the National Response Center (NRC)
2. Number of Incident Notifications in the Border Region Received by COATEA/CENACOM
3. Binational Capacity Building and Training Events

Goal 5: Compliance Assistance

1. Regulated U.S. and Mexico facilities in the border region
2. Number of State and Federal Inspections for Federal Programs in the U.S. Border Region
3. Number of Federal Inspections in the Mexican Border Region
4. Pollution Reduction from Federal Enforcement Actions in the U.S. Border Region

Goal 1: Reduce Air Pollution

- 4 Projects

Goal 2: Improve Access to Clean and Safe Water

- 6 Projects

Goal 3: Promote Materials Management, Waste Management, and Clean Sites

- 10 Projects

Goal 4: Enhance Joint Preparedness for Environmental Response

- 0 Projects

Goal 5: Compliance Assurance and Environmental Stewardship

- 0 Projects

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

- 2 Projects

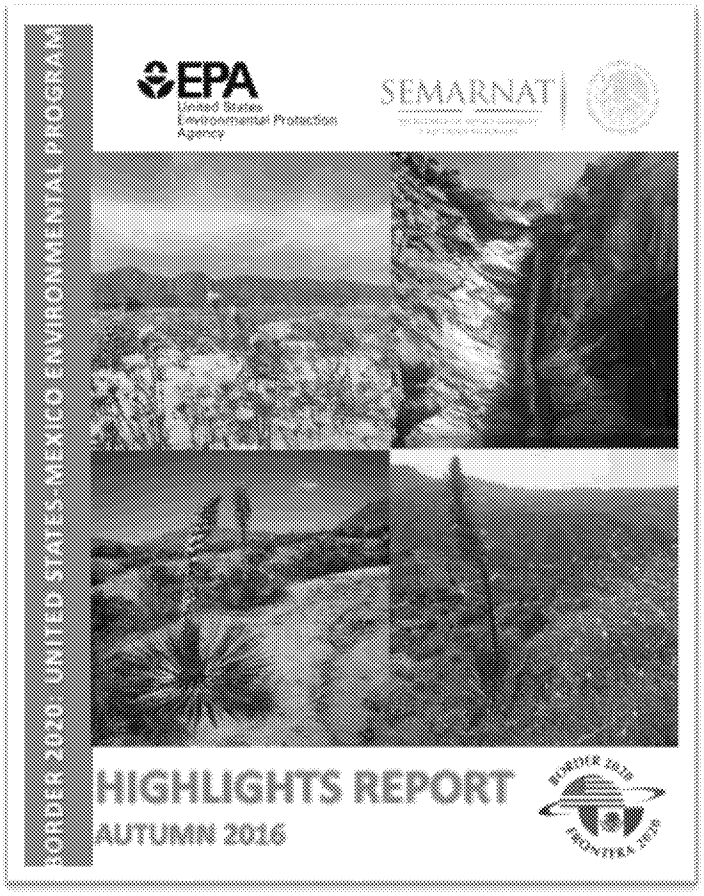
MORE INFORMATION (www.epa.gov/border2020):

OEJTIA Director
Arturo Blanco (blanco.arturo@epa.gov)
(214) 665-3182

Region 6 U.S.-Mexico Border Office Director
Carlos Rincon (rincon.carlos@epa.gov)
(915) 533-7273

Texas-Tamaulipas-Nuevo León-Coahuila Regional Workgroup Liaison
Japhet Cruz-Diaz cruz-diaz.japhet@epa.gov
(214) 665-3176

Border 2020 Highlight Report



This report contains some highlights of the achievements and efforts of the Border 2020 Program during the last two years. We are pleased that during the last two years of work, thirty-five projects have been concluded to improve conditions facing border communities and eleven are in the implementation phase. These projects have addressed challenges of clean water, air quality, proper management of solid waste, environmental emergency response and environmental stewardship. Sixteen (16) Region 6 projects were highlighted in this report.

Texas-New Mexico-Chihuahua Regional Workgroup:

- Improving air quality monitoring in Ojinaga (Goal 1: Air)
- New Mexico-Chihuahua border study on air quality (Goal 1: Air)
- Urban keyhole gardens rainwater-harvesting techniques (El Paso Water Utilities) (Goal 2: Water)
- Bio solids recycling agriculture at Juárez valley (Goal 3: Waste)
- Tire amnesty collection events in El Paso County (Goal 3: Waste)
- Ysleta del Sur Pueblo Community Collection Center (Goal 3: Waste)
- Regional plan for waste management in Ascension and Janos (Goal 3: Waste)
- Hazardous railcar leak mitigation preparedness in the Paso del Norte region. (City of El Paso) (Goal 4: Emergency Response)

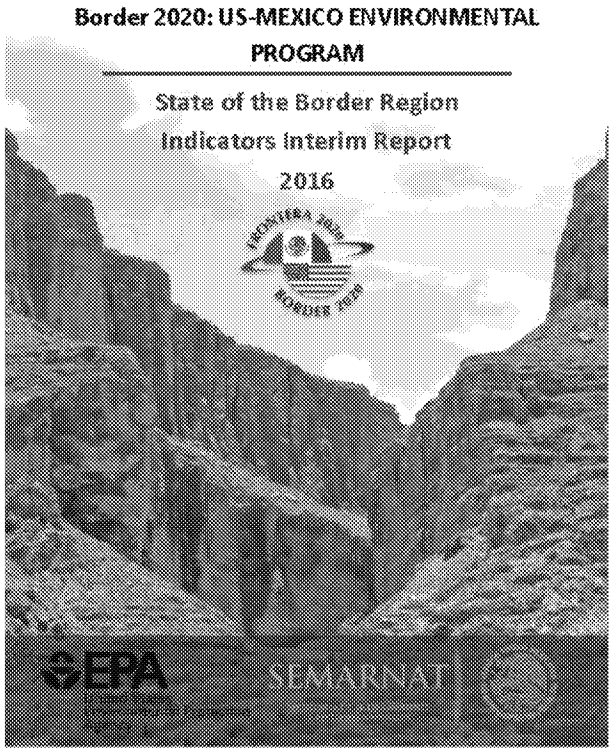
Texas-Coahuila-Nuevo León-Tamaulipas Regional Workgroup:

- Characterization of drayage vehicle activities and emissions in the Laredo air shed (Goal 1: Air)
- Management of fat, oil and grease in Nuevo Laredo (Goal 3: Waste)
- Conservation of the Arroyo Las Vacas in Acuña (Goal 3: Waste)
- Waste generation diagnostic for the Northeast Border Region (Goal 3: Waste)
- Alamo Recycling Team Includes Everyone (ARTIE) Program (Goal 3: Waste)
- Supporting Pharr efforts to maintain a clean community (Goal 3: Waste)
- Bi-national exercises at the cities of Harlingen and Matamoros (Goal 4: Emergency Response)
- Promotoras-led environmental health education to children in Eagle Pass (Environmental Education & Environmental Health)

Both Regions / Borderwide:

- COOPERATION TO IMPROVE ENVIRONMENTAL HEALTH (EPA – US/MX Border Health Commission Collaborative Agreement)
    - Children's Symposium (El Paso September 2015)
    - Promotora Trainings
- Enhance joint preparedness for environmental emergencies
- End-of-life Vehicles Guide
- United States-México Border Water Infrastructure Program.

State of the Border: Indicators Interim Report (2016)



The State of the Border Region 2016 Interim Report provides information on the status and trends of environmental quality in the U.S.-Mexico border region. In doing so, it also illustrates progress made under the U.S.-Mexico Border 2020 program.
This report builds on the flagship 2005 State of the Border Region report and the 2010 State of the Border Region report. It refreshes and updates key indicators from 2010 and adds new indicators to reflect new areas of Border 2020 focus and activity. As with previous reports, this report is structured around the goals of Border 2020 with chapters on air, water, land, environmental readiness and response, and enforcement and compliance.

Indicators are presented with brief data source information below each indicator. Complete underlying data and details on indicator data sources are available in a companion document, State of the Border Region 2016 Interim Update: Indicator Metadata and Data Tables.

Types of Indicators:

- ***Pressure:*** Indicators that describe human activities that place stresses on the environment.
- ***Need:*** Indicators that inform our understanding of the magnitude or type of need for a programmatic response.
- ***Output:*** Indicators that measure activities, products, or services resulting from a project or program.
- ***Outcome:*** Indicators that measure changes in the state of the environment or the effects of environmental conditions on human and/or ecological health

REPORT INDICATORS

Goal 1: Air

1. Number of Days Exceeding Air Quality Standards in Border Monitoring Areas

Goal 2: Water

1. Number of Unserved Homes Connected to Safe Drinking Water through the Border Water Infrastructure Program
2. Number of Unserved Homes Connected Wastewater Collection and Treatment Services through the Border Water Infrastructure Program

Goal 3: Waste

1. Per-Capita Municipal Solid Waste Disposal in U.S. Border States and Counties
2. Per-Capita Municipal Solid Waste Generated in Mexican Border States
3. Number of Electronics Refurbishers and Recyclers in the Border Region Certified to R2 or e-Stewards

Goal 4: Emergency Response & Preparedness

1. Number of Incident Notifications in the Border Region Received by the National Response Center (NRC)
2. Number of Incident Notifications in the Border Region Received by COATEA/CENACOM
3. Binational Capacity Building and Training Events

Goal 5: Compliance Assistance

1. Regulated U.S. and Mexico facilities in the border region
2. Number of State and Federal Inspections for Federal Programs in the U.S. Border Region
3. Number of Federal Inspections in the Mexican Border Region
4. Pollution Reduction from Federal Enforcement Actions in the U.S. Border Region

Goal 1: Reduce Air Pollution

- 4 Projects

Goal 2: Improve Access to Clean and Safe Water

- 6 Projects

Goal 3: Promote Materials Management, Waste Management, and Clean Sites

- 10 Projects

Goal 4: Enhance Joint Preparedness for Environmental Response

- 0 Projects

Goal 5: Compliance Assurance and Environmental Stewardship

- 0 Projects

Promote Cross-Cutting Efforts Related to Environmental Health & Environmental Education

- 2 Projects

MORE INFORMATION (www.epa.gov/border2020):

OEJTIA Director
Arturo Blanco (blanco.arturo@epa.gov)
(214) 665-3182

Region 6 U.S.-Mexico Border Office Director
Carlos Rincon (rincon.carlos@epa.gov)
(915) 533-7273

Texas-Tamaulipas-Nuevo León-Coahuila Regional Workgroup Liaison
Japhet Cruz-Diaz cruz-diaz.japhet@epa.gov
(214) 665-3176