



REGION 6 2 Year Action Plan (2019-2020) Texas – New Mexico – Chihuahua Regional Workgroup (TX/NM/CHIH RWG)

The Texas-New Mexico-Chihuahua Region stretches approximately 500 miles (800 km) along the international boundary from the Coronado National Forest to Big Bend National Park and includes the following major sister cities: Columbus, NM-Palomas, Chihuahua, Las Cruces, NM-El Paso, TX-Ciudad Juárez, Chihuahua and Presidio, TX-Ojinaga, Chihuahua. This region is a part of the Chihuahua Desert ecosystem that is primarily comprised of arid to semi-arid biotic communities and is home to the second largest community along the U.S.-Mexico Border known as the “Paso del Norte region.” The Paso del Norte region is made up of the fastest growing desert cities (Ciudad Juárez, El Paso, and Las Cruces) that share the same limited water resources. Almost 2 million residents live in the urban and semi-urban area. This population forms an important part of the growing binational economy of the region.

Federal, State and Tribal Partners from the U.S. and Mexico serve as the Co-Chairs of the TX/NM/CHIH RWG (see Organizational Chart). The Co-Chairs support local Taskforce efforts and coordinate activities at the regional and local levels. Among other responsibilities, Co-Chairs encourage open dialogue and public participation, leverage resources to achieve program goals, help ensure concrete measurable results, and recommend issues beyond regional scope to be addressed by the Policy Forums. The US EPA El Paso Border Office staff, together with Program Partners help coordinate the Tri-State RWG activities and reports to ensure transparency and timely access to environmental information. The multiple taskforces within the regional workgroup are the foundation of the RWG that encourage local decision-making, priority-setting and project implementation to solve the border region’s environmental problems. The Taskforces promote awareness and education on environmental issues, and coordinate efforts with community residents, governmental agencies, universities and NGO’s on urban and rural communities on both sides of the border.

The Texas-New Mexico-Chihuahua Regional Workgroup is comprised of the following taskforces:

1. Joint Advisory Committee for Air Quality Improvement (Goal 1)
2. Border 2020 TX/NM/CHIH Water Taskforce (Goal 2)
3. Border 2020 TX/NM/CHIH Waste Taskforce (Goal 3)
4. Border 2020 TX/NM/CHIH Emergency Response Taskforce (Goal 4)
5. Compliance Assistance, Environmental Stewardship, and Cooperative Enforcement Taskforce (CAESCE) (Goal 5)
6. Border 2020 TX/NM/CHIH Environmental Education Committee (Multi-media)
7. Border 2020 TX/NM/CHIH Environmental Health Committee (Multi-media)
8. Border 2020 New Mexico-Chihuahua Rural Taskforce (Multi-media)
9. Border 2020 Texas-Chihuahua Rural Taskforce (Multi-media)

Two Year Action Plan (TX/NM/CHIH RWG)

Goal 1 – Reduce Air Pollution							
Project#	Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
<p>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 reduction measures.</p>							
1-01	Compliance of Juarez's Vehicle Emissions Inspection Program (VEIP) strengthened by State of Chihuahua's Vehicle Emissions Inspection Program (VEIP) implementation	City of Juárez Ecology (DGE) VEIP and State of Chihuahua Ecology and Urban Development Secretariat (SDUE)	Private vehicle owner per annual vehicle inspection, City of Juarez staff time	Margarita E. Peña P, City of Juarez Ecology Director ecologiamunicipal@juarez.gob.mx Gilberto Wenglas of State of Chihuahua Ecology Director, SDUE gilberto.wenglass@chihuahua.gob.mx	Annual 25% increase from the previous year's approved vehicles, toward reaching close to 100% of vehicle fleet	Apply agreement entered between City of Juarez's Ecology Administration with VEIP Centers owner on upgrade of equipment accordingly to SEMARNAT NOM-047 Have all vehicles comply with the VEIP, at time of vehicle registration and renewal of license plate	Significant Progress
1-02	Compliance of State of Juarez's mass transit public transportation and Buses to emissions inspection	City of Juárez Ecology (DGE) VEIP, State of Chihuahua Ecology and Urban Development Secretariat (SDUE) and Ciudad Juarez Municipal Institute for Research and Planning (IMIP)	Public busses concessioner, annual License / permit fee and pay at biannual VEIP	Margarita E. Peña P, City of Juarez Ecology Director ecologiamunicipal@juarez.gob.mx Gilberto Wenglas of State of Chihuahua Ecology Director, SDUE gilberto.wenglass@chihuahua.gob.mx Salvador Barragan, State -SDUE's Ciudad Juarez Office Director salvador.barragan@chihuahua.gob.mx	20,000 public transportation units per semester Add Route 2 to the already Route 1 for mass public transportation	Set up a Juarez's comprehensive mass public transportation and Mobility Plan, a BRT be fully implemented by 2021 Surveillance and Compliance o Freight and Public Transportation Emissions Inspection Program	Significant Progress
1-03	Emissions reduction of collective transport infrastructure connecting freight and private owned vehicle routes to International Ports of Entry (POE)	Ciudad Juarez Municipal Institute for Research and Planning (IMIP)	Total: \$105,640.00, of which \$61,220.00 funded by NADB-EPA Border 2020 Grant, the remaining are IMIP's Matching Funds to NADB-EPA	Roberto Mora Palacios, imip@imip.org.mx Nicolás López nlopez@imip.org.mx	Vehicular classification transportation survey, development of a micro simulation model, and model of emissions in the various freight and POV route scenarios with the project and final design.	Development of a study and the final design for the collective transportation and infrastructure associated in the International Port of Entry "Paso del Norte", with the aim of substantially reducing crossing times, and in reducing the contaminant emissions.	Deliverable Achieved

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			Grant			For the project implementation CBP and Fideicomiso de Puentes Fronterizos de Chihuahua (Chihuahua's POE Fund-Trust) would have to schedule the funds for its construction and operation	
							No Progress
<p>Objective 2: By 2020, reduce pollutant emissions in order to approach attainment of respective national ambient air quality standards in the following airsheds: San Diego/Tijuana, Imperial County/Mexicali, Ambos Nogales, Paso del Norte (El Paso/Juarez/Sunland Park).</p>							
1-04	Cd. Juarez's PROAIRE 2025 (equivalent to-SIP) Air Quality Improvement Management Program's measures included in Chihuahua's PROAIRE 2016–2025. Address's cost-effective measures that would effectively reduce air emissions.	Chihuahua and Cd. Juarez's government administration SEMARNAT; STATE of Chihuahua Sanitary Jurisdiction #2; JAC and academic institutions; State of Chihuahua Government (SDUE)		Gilberto Wenglas of State of Chihuahua SDUE, gilberto.wenglass@chihuahua.gob.mx Margarita E. Peña P, City of Juarez Ecology Director ecologiamunicipal@juarez.gob.mx	Identify and implement PROAIRE 2025 measures that apply to Ciudad Juarez's border air-sheds to leverage on activities that are part of the JAC Strategic Plan and or projects within City of Juarez Projects are to be implemented	Start implementation of State of Chihuahua PROAIRE. Report progresses at JAC's meetings Evaluate effectiveness of measures in PROAIRE, at end of each calendar year	Initial Progress
1-05	Brick-kilns emissions reduction and assessment of risk of exposure Replace traditional Brick-kilns to MK2 design or alternative technology	State of Chihuahua - SDUE and Ciudad Juarez Government Administration partnering with brick makers' association and academic institutions - UACJ		Alba Yadira Corral Avitia UACJ alba.corral.avitia@gmail.com Gilberto Wenglas SDUE gilberto.wenglass@chihuahua.gob.mx Margarita Peña, Cd Juarez-DEM ecologiamunicipal@juarez.gob.mx	Bring into being a compliance agreement with brick making neighborhood on firing Schedule Construction of Modified Brick Kilns Design known as MK2 Demonstrate alternative technology that require non-firing brick production	City of Juarez and State of Chihuahua to agree collaborative enforcement surveillance for of brick firing inspections with support by City Police if needed. when required Brick-kilns relocation to an appropriate location away from populated neighborhoods	Initial Progress

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Project#	Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
1-06	Study for identifying opportunities on air emission reduction from drayage truck activity on the Texas – Mexico with special focus on the Paso del Norte air basin: Ciudad Juarez, Chihuahua–El Paso, TX – Dona Ana County, NM	Texas Commission on Environmental Quality (TCEQ), Texas A&M’s Transportation Institute (TTI) and the University of TX at Austin LBJ School of Public Affairs	\$25K USD TCEQ and EPA	Reza Farzaneh, TTI, Reza.Farzaneh@tti.tamu.edu Eddie Moderow, TCEQ, eddie.moderow@tceq.texas.gov	Develop a white paper to identify opportunities for NOX emissions reductions from drayage and heavy-duty diesel truck activity at the Paso del Norte border Port of Entry (POE) with special emphasis at the El Paso, TX – Ciudad Juárez, Chihuahua – Dona Ana County, NM	Produce a Binational Diesel Emissions Reduction Training Program’s directed to local stakeholders, to informing them on Program’s Policy to take educated decisions. The white paper will generate a synthesis – knowledge about drayage emissions to improve knowledge and information exchange on air quality in the Paso del Norte area and lead to development of a binational program like TX’s Emissions Reduction Program (TERP)	Deliverable Achieved
<p>Objective 3: By 2018, maintain effective air monitoring networks and provide real-time access to air quality data: California/Baja California, Arizona/Sonora, Paso del Norte Airshed, and any additional binational airshed that is designed as non-attainment for U.S. or Mexican air quality Standards prior to 2015.</p>							
1-07	Deploy, maintain & operate the Juarez Air Quality Monitoring network that jointly with El Paso TX-Dona Ana County, NM are designed to measure Ozone, Carbon Monoxide and Particulate Matter: PM _{2.5} , and PM ₁₀ , as well gather meteorological data	City of Juárez Ecology Air Quality Program, YDSP Air Quality Team, JAC Air Quality Technical Working Committee, TCEQ, SEMARNAT–INECC, State of Chihuahua SDUE.	City of Juarez’s \$55,000.00 appropriations budget	Margarita E. Peña P, City of Juarez Ecology Director ecologiamunicipal@juarez.gob.mx Gilberto Wenglas SDUE gilberto.wenglass@chihuahua.gob.mx Francisco Gomez Licon SDUE francisco.gomez@chihuahua.gob.mx	Juarez’s Air Quality Monitoring Network assessment, repairs, upgrade, and internet installment to improve connection to improve real time reporting and forecasting of ozone, PM _{2.5} , and PM ₁₀ air quality.	Establish mechanism for sustainable means of financial support for consumables and continuous operation, maintenance and calibration of AQMS Effective operation of air monitoring stations and real-time air monitoring data on web.	Moderate Progress

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1-08	Encourage the State of Chihuahua to apply for federal funding available to States at the Federal Annual appropriation through the Federal Financing Program or Presupuesto de Egresos de la Federacion (PEF)) to improve Juarez’s air quality monitoring network by expanding monitoring coverage and its analytical capabilities.	Chihuahua Executive Administration, City of Juarez’s government; State of Chihuahua Congress	Federal Government Appropriation line item in SEMARNAT’s Annual Budget \$325,000	Dr. Luis Felipe Siqueiros, Secretary State of Chihuahua SDUE luis.siqueiros@chihuahua.gob.mx Gilberto Wenglas SDUE gilberto.wenglass@chihuahua.gob.mx Juarez’s Mayor, Armando Cabada ecologiamunicipal@juarez.gob.mx Margarita E. Peña P, City of Juarez Ecology Director ecologiamunicipal@juarez.gob.mx	Establishment of a new air quality monitoring sites in areas where data is needed to protect health impacts at non-covered communities	Real time data available and published at www.cccjac.org Enhance the quality of data for public notification	No Progress
1-09	Maintain operation of Rural Areas air quality monitoring network for reliable date reporting to community of the PM ₁₀ levels, as well as other priority contaminants, as established under the NMDOH-OBH funded by the Binational Air Quality Assessment	New Mexico Environment Department (NMED); New Mexico Office of Border Health within Department of Health (NMDOH-OBH); Consortium of NNMSU-UTEP-UACJ-Desert Research Institute, National Weather Service Santa Teresa office; and NMSU	NMED Border and co-funding from NMDOH-OBH \$20,000	NMED Michael Baca michael.baca1@state.nm.us NMDOH Freida Adams Freida.adams@state.nm.us NMSU Dave DuBois dwdubois@nmsu.edu	Predict the onset of windblown dust through sensor development and dust storm weather pattern climatology for the border region. Findings by NM Climatologist will allow for a binational AQ monitoring information reporting to be included in the State of Chihuahua’s PROAIRE. Make data available on Internet and other appropriate public access outlets (including mass and social media) in all three states.	Thru an analysis map and monitor the sources of windblown dust in the three states. Integrate air quality monitoring efforts, data sharing and reporting among state and local authorities and universities of NM, Northern Chihuahua and West TX. Assessment of climatological and meteorological phenomena; Inventory and characterization of sources of Particulates during extreme weather events.	Deliverable Achieved
1-10	El Paso Ceilometer operations & maintenance to compare mixing heights measured with different instruments and by	Texas Commission on Environmental Quality (TCEQ) and University of Texas at El Paso (UTEP)	\$107k USD TCEQ and EPA	Eddie Moderow, TCEQ, eddie.moderow@tceq.texas.gov Patricia de la Cruz, TCEQ Patricia.delacruz@tceq.texas.gov	UTEP to operate a ceilometer and analyze data located at TCEQ’s continuous monitoring station of the City of Socorro, El Paso County, TX	Complete analyses to evaluate and compare upper air monitoring systems currently operating in the El Paso area	Deliverable Achieved

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	modeling. A ceilometer instrument measures the cloud-base height and mixing height of the boundary layer (BL), important for understanding the development and dispersion of pollutants, specifically ozone, and integral to modeling and forecasting.			Dr. Rosa Fitzgerald, UTEP rfitzgerald@utep.edu			
1-11	Binational air quality monitoring in the Paso del Norte	Ciudad Juárez Ecology, TCEQ, EPA, SEMARNAT, SEDUE, Ysleta del Sur Pueblo, City of El Paso	\$86k USD TCEQ, EPA, Ciudad Juárez Ecology	Margarita E. Peña P, City of Juarez Ecology Director ecologiamunicipal@juarez.gob.mx Eddie Moderow at TCEQ eddie.moderow@tceq.texas.gov	Procurement of funds to complete network upgrades and complete necessary maintenance to the network in the Ciudad Juárez Air Quality Units.	Collaborate with stakeholders in the Paso del Norte to improve air quality monitoring in the region.	Deliverable Achieved
1-12	Measure PM 2.5 and PM10 on both sides of the border using low cost sensors for increased spatial resolution to complement the existing monitoring network in the Paso del Norte airshed	TCEQ, Ciudad Juarez's Autonomous University (UACJ), UTEP	\$90k USD TCEQ and EPA	Eddie Moderow, TCEQ eddie.moderow@tceq.texas.gov Melanie Scruggs, TCEQ melanie.scruggs@tceq.texas.gov	Quantify emissions associated with public transportation at specific sectors, such as industrial manufacturing or cross-border buses. Analyze air quality in neighborhoods around commercial brick kilns Analyze emissions from cross-border transportation of goods associated with U.S.-Mexico trade	Produce a case study of scientific measurement & analysis of air quality using low-cost air sensors and to foster binational technical exchange Complement existing monitoring network in the Paso del Norte airshed and bolster continued sharing of technical data and expertise between Texas and Chihuahua	Initial Progress

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1-13	Air Quality and weather climatic Network UACJ	Universidad Autónoma de Ciudad Juárez, Chihuahua México (UACJ)	\$39,400 of which 29,400K are from Border 2020 Grant	Dr Adrian Vazquez fvazquez@uacj.mx	Establish platform to O3, PM2.5 and CO from low cost community monitors in IIT, Anapra, Clinic and UT provide a real-time visualization of impacts under certain environmental and meteorological conditions, during times of waste fires, vehicular traffic and other emissions, in support of the Air Quality Program's management mechanisms on a permanent basis	Visualization platform to access climate data and real time met data Seek to provide access to climatic data series from 8 Paso del Norte air basin's Stations in order to improve characterization, support an alert network to report on environmental quality conditions	Deliverable Achieved
							Deliverable Achieved
Objective 4: By 2015, support completion of climate action plans in each of the six northern Mexican Border States (as appropriate) and build the necessary capacity to guarantee sustained implementation.							
There are currently no active projects under this objective for the 2019-2020 cycle							
Objective 5: By 2020, reduce emissions and associated impacts through energy efficiency and/or alternative/renewable energy projects.							
1-14	The Ysleta del Sur Pueblo (YDSP) will reduce particulate matter by improving dirt roads on the Tribal Ranch	YDSP Environmental Department	Tribal Funding & NRCS CSP Program; Amount undetermined	Evaristo Cruz ecruz@ydsp-nsn.gov Barbra Valdivieso bvaldivieso@ydsp-nsn.gov	The Pueblo will Identify portions of YDSP - ranch that would greatly benefit from road cover application and look at cost of application, aimed toward dust abatement by hardening the soil	Have product option, other than "Caliche", to be applied that are environmentally safe, then, The Pueblo continue to review the project in search of vendors and identify funding sources. Continuous	Initial Progress

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Project#	Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
1-15	Reduce Ysleta del Sur Pueblo (YDSP) carbon footprint through energy efficient retrofits at tribal government buildings including at HVAC systems and energy efficient glass	YDSP Environmental Department	\$280,000.00 that include Tribal Matching funds and EPA Region 6 Air Program	Evaristo Cruz ecruz@ydsp-nsn.gov Barbra Valdivieso bvaldivieso@ydsp-nsn.gov	Installment of double panel weatherproof windows and LED lighting at the offices within the Pueblo Administration building. Retrofit administration buildings with weatherized windows to improve the energy efficiency	The Pueblo is continuing to work with EPA Portfolio manager in logging energy utilization data, and to benchmark the facilities offices.	Deliverable Achieved
1-16	Reduce YDSP Carbon Footprint by converting water wells to run of solar panels rather than generators or local electric grid	YDSP Environmental Department; NRCS/USDA;	\$30,000.00; Tribal Funding and USDA / NRCS Environmental Quality Incentives Program (EQIP)	Evaristo Cruz ecruz@ydsp-nsn.gov Barbra Valdivieso bvaldivieso@ydsp-nsn.gov Santana Villa (NRCS/USDA)	First, the Pueblo Ranch have retrofitted 5 wells with solar panels, improving energy saving and reducing carbon footprint An addition of two other wells have been retrofitted with solar systems.	The Pueblo will begin benchmarking to empirically identify cost savings and energy savings.	Significant Progress
1-17	Renovation of existing facility at the Pueblo to provide a safe & secure location for storing used tires, recyclables, e-waste and other special waste items diverted from the local landfill.	YDSP Environmental Department, and EPA – GAP Liaison	\$125,00.00NEPA	Evaristo Cruz ecruz@ydsp-nsn.gov Barbra Valdivieso bvaldivieso@ydsp-nsn.gov	Establishment of the recycling waste facility to be fully functional thru an organized method for collecting material that will allow for greater quantities to be stored and to have greater flexibility in partnering with unique end users	Improve the Pueblo existing facility that will help handle recyclable material, used tires and electronic waste. The facility will also be equipped to handle and carryout collection services	Significant Progress

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Project#	Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
1-18	Provide an alternative source of energy with a solar farm and solar panels at City of Presidio rural community.	City of Presidio Economic Department and City Manager, Brad Newton, Mayor John Ferguson and Presidio School District		John Ferguson jferguson@presidiotx.us Brad Newton bnewton@presidiotx.us	Generation, distribution and use of Solar Energy farm, and Installation of solar panels at Public buildings within Presidio City of Presidio households to leverage on energy generation at solar farm and extend throughout every school and other public services facilities by installing solar panels	To have in full operation a Solar farm producing energy to be shared and transported to City of Marfa City of Presidio would seek extending use of alternative source by installing solar panels at public buildings including at Schools	Deliverable Achieved