



California-Baja California 2019-2020 Border 2020 Action Plan



Goal 1 – Reduce Air Pollution						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
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 respective vehicle emissions standards, and reduce vehicle emissions at ports-of-entry through anti-idling and other feasible reduction measures.						
Revise on-road motor vehicle emissions in Baja California.	California Air Resources Board (CARB), USEPA	USEPA, CARB: \$100,000	Elizabeth Melgoza (CARB) elizabeth.melgoza@arb.ca.gov Laura Lawrence (USEPA) lawrence.laura@epa.gov	<ul style="list-style-type: none"> Improved on-road emission inventory estimates in Baja California. 	<ul style="list-style-type: none"> More realistic understanding of on-road vehicle emissions. Improvements to air quality modeling and planning efforts. 	No Progress
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).						
Media outreach campaign in Mexicali and Imperial County to reduce open burning and fireworks during holiday season	Imperial County Air Pollution Control District (ICAPCD), Air Quality Task Force, and Baja CA's Subsecretary for Sustainable Development (BCSSD)	USEPA, ICAPCD: \$50,000	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us Saúl Guzmán (BCSSD) sguzmang@baja.gob.mx	<ul style="list-style-type: none"> TV and radio spots encouraging the public to reduce open burning and use of fireworks. 	<ul style="list-style-type: none"> Campaign expanded public awareness and increased dialogue on this issue. Municipality of Mexicali prohibited and enforces on bonfires within city limits. Ongoing. 	Deliverable Achieved
Media Outreach of Air Quality Index (AQI) website to educate the community where they can obtain daily air quality information (Phase 1)	ICAPCD, Air Quality Task Force, and BCSSD	USEPA, ICAPCD: \$50,000	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us Saúl Guzmán (BCSSD) sguzmang@baja.gob.mx	<ul style="list-style-type: none"> TV, radio spots and marquee ads to encourage the public to sign-up for air quality alerts. 	<ul style="list-style-type: none"> Community education expanded public awareness to sign up for air quality alerts. Ongoing. 	Deliverable Achieved



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Mdia Outreach of Air Quality Index (AQI) website to educate the community where they can obtain daily air quality information (Phase 2)	ICAPCD, Air Quality Task Force, and BC's Secretary Sustainable Development	USEPA, ICAPCD: \$50,000	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us Saúl Guzmán (BCSSD) sguzmang@baja.gob.mx	<ul style="list-style-type: none"> Update all TV, radio spots as spots were outdated. Continue to update spots including Mexicali Open burn commercials. 	<ul style="list-style-type: none"> Community education expanded public awareness to sign-up for air quality alerts. Mexicali Municipality Agricultural Burn Commercials. Open Burn Commercials through Mexicali Fire Department. Ongoing 	Deliverable Achieved
Develop an Ozone (O ₃) State Implementation Plan (SIP) for San Diego County	SDAPCD, CARB, USEPA	Participating Agencies Staff time	Nick Cormier (SDAPCD) nick.cormier@sdcounty.ca.gov	<ul style="list-style-type: none"> Submit a SIP demonstrating reductions in ozone precursor emissions in San Diego County. 	<ul style="list-style-type: none"> Expect to submit to San Diego County Air Pollution Control Board for consideration by Fall 2020. Expect to submit to CARB Board for consideration by Fall 2020. Expect to submit to USEPA by Fall 2020. 	Significant Progress
Develop an Ozone (O ₃) State Implementation Plan (SIP) for Imperial County	ICAPCD, CARB, USEPA	Participating Agencies Staff time	Monica Soucier (ICAPCD)	<ul style="list-style-type: none"> Submit a SIP documenting ozone precursor emission in Imperial County. 	<ul style="list-style-type: none"> Expect to submit to Imperial County Board of Supervisors for consideration in 2020. Expect to submit to USEPA in 2020. 	Initial Progress
Improve street infrastructure to improve traffic flow in Playas de Rosarito	North American Development Bank (NADB), Comisión Estatal de Servicios Públicos de Tijuana (CESPT), Municipality of Playas de Rosarito	NADB, Federal Government of Mexico: \$ 20.37 M (Pesos)	Cuitlahuac Cruz (NADB) ccruz@nadb.org	<ul style="list-style-type: none"> Improvements to main street infrastructure to alleviate traffic congestion during peak hours. 	<ul style="list-style-type: none"> Decreased traffic congestion during peak hours, resulting in less idling and a decrease in vehicle emissions. 	No Progress



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Environmental Justice Analysis for Air Quality and Transportation in Mexicali	University of California at Berkeley (UCB), Tecnológico de Monterrey	USEPA/NADB Border Program \$100,000 Leverage: \$12,288	Sergio Castellanos (UCB) sergioc@berkeley.edu Jorge Hernandez (NADB) jhernandez@nadb.org Laura Lawrence (USEPA) lawrence.laura@epa.gov	<ul style="list-style-type: none"> Develop an environmental justice index for transportation, constructed on multiple indicators from population and pollution-related sources. Assess which public bus routes could be electrified for greatest emissions reductions benefit for sensitive populations. 	<ul style="list-style-type: none"> Improved understanding of air quality impacts on sensitive populations in Mexicali. Information for decisionmakers on best public bus routes for potential electrification. 	Initial Progress
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.						
Operate and maintain the Imperial County Air Quality Monitoring Network	ICAPCD, CARB	ICAPCD, USEPA, CARB: Staff time and maintenance costs	Reyes Romero (ICAPCD) reyesromero@co.imperia.ca.us Monica Soucier (ICAPCD) monicasoucier@co.imperial.ca.us	<ul style="list-style-type: none"> Effective operation of air monitoring stations and post real-time air monitoring data on web. 	<ul style="list-style-type: none"> Monitoring data available online at: https://www.arb.ca.gov/html/ds.htm Ongoing. 	Deliverable Achieved
Maintain the real-time reporting website for Imperial County Air Quality Monitoring Network	CARB, USEPA, ICAPCD	USEPA: \$100,000	Elizabeth Melgoza (CARB) elizabeth.melgoza@arb.ca.gov Belen Leon (ICAPCD) belenleon@co.imperial.ca.us	<ul style="list-style-type: none"> Real time reporting and forecasting of ozone, PM_{2.5}, and PM₁₀ air quality in Imperial County. 	<ul style="list-style-type: none"> Real time data available at: http://www.imperialvalleyair.org Ongoing. 	Deliverable Achieved
Expansion of the REDSPIRA Sensor Network in the Mexicali Valley	Imperial-Mexicali Air Quality Task Force, ICAPCD, REDSPIRA	USEPA/NADB Border Program \$50,000 Leverage: \$140,335	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us Alberto Mexia (Redspira) amexia@certuit.com Jorge Hernandez (NADB) jhernandez@nadb.org Laura Lawrence (USEPA) lawrence.laura@epa.gov	<ul style="list-style-type: none"> Expand the REDSPIRA network by adding 30 additional sensors. Develop a quality assurance program for the additional sensors added to the network. Expand the air quality flags program to 30 additional elementary schools in the Mexicali Valley. 	<ul style="list-style-type: none"> Additional information on air pollution levels in the Mexicali Valley. Quality assurance of data collected through low-cost sensors. Education and awareness among school-aged children and other community members. 	No Progress



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Operate and maintain the San Diego Air Quality Monitoring Network	SDAPCD, CARB	SDAPCD: Staff time and maintenance costs	Bill Brick (SDAPCD) Bill.Brick@sdcounty.ca.gov	<ul style="list-style-type: none"> Effective operation of air monitoring stations and real-time air monitoring data on web. 	<ul style="list-style-type: none"> Monitoring data available online https://www.arb.ca.gov/html/ds.htm Ongoing 	Deliverable Achieved
Operate and maintain PM _{2.5} Air Quality Monitor at the Otay Mesa Port of Entry	SDAPCD, USEPA, General Services Administration (GSA), CBP	SDAPCD, USEPA: \$75,000	Bill Brick (SDAPCD) Bill.Brick@sdcounty.ca.gov Laura Lawrence (USEPA) lawrence.laura@epa.gov	<ul style="list-style-type: none"> Improve understanding of PM_{2.5} emissions originating from trucks and vehicles crossing Otay Mesa Port of Entry. 	<ul style="list-style-type: none"> District will collect PM_{2.5} data at selected site and make data available to the public online. 	Moderate Progress
Install and operate PM _{2.5} Air Quality Monitor at the U.S. Consulate in Tijuana	USEPA, SDAPCD, DOS	SDAPCD, USEPA: \$115,000	Bill Brick (SDAPCD) Bill.Brick@sdcounty.ca.gov Idalia Perez (USEPA) perez.idalia@epa.gov	<ul style="list-style-type: none"> Installation of PM_{2.5} monitor in the consulate in Tijuana. 	<ul style="list-style-type: none"> Consulate Tijuana will operate a continuous PM_{2.5} monitor and make the data available to public online. 	Initial Progress
Continued support of the Baja California Air Monitoring Network	CARB	CARB, SPA, USEPA: \$20,000 plus lab time and materials	Fernando Amador (CARB) fernando.amador@arb.ca.gov	<ul style="list-style-type: none"> Beginning 2020, SPA has taken over PM₁₀ filter analysis and reporting. CARB continues certification of SPA's calibration standards at the Sacramento lab. In 2020 CARB will train SPA and the City of Mexicali on station calibration. 	<ul style="list-style-type: none"> SPA continues PM₁₀ filter analysis and reporting. Certification of SPA calibration standards at the Sacramento lab. SPA station calibration is improved resulting in better quality data. 	Significant Progress



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Toxics monitoring of windblown dust from Salton Sea exposed playa	USEPA, CARB, Imperial Irrigation District (IID)	USEPA: \$150,000	Earl Withycombe (CARB) earl.withycombe@arb.ca.gov	<ul style="list-style-type: none"> Concentrations of toxics in windblown dust sampled at Salton Sea shoreline monitoring stations and exposed playa sites. Improved understanding of sources of windblown dust through video-recording. 	<ul style="list-style-type: none"> Two stationary monitors installed at Sonny Bono and Bombay. Beach - show PM₁₀ levels below 150 ug/m³ 24-hour standard. PM filters collected during wind events from portable samplers were analyzed for toxic elements. Final report submitted to USEPA March 2020. 	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. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Objective 5: By 2020, reduce emissions and associated impacts through energy efficiency and/or alternative/renewable energy projects.						
There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						



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Goal 2 – Improve Access to Clean and Safe Water						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Objective 1: Promote the increase in the number of homes connected to safe drinking water and adequate wastewater treatment.						
Sub-objective 1a: By end of 2018, promote access to safe drinking water to at least 1,600 households border-wide. Revise targets every two years.						
There are currently no active projects under this sub-objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Sub-objective 1b: By end of 2018, promote access to adequate wastewater sanitation to 12,000 households border-wide. Revise targets every two years.						
Tijuana Rehabilitation of Colector Poniente 1A	USEPA, CESPT, CONAGUA, NADB	\$2.42 million BEIF, \$6.7 total cost	Doug Liden (USEPA) Liden.douglas@epa.gov Gabriela Baeza-Castañeda (USEPA) baeza-castaneda.gabriela@epa.gov	<ul style="list-style-type: none"> Will target to improve 23,506 wastewater connections 	<ul style="list-style-type: none"> Collector rehabilitation helps mitigate transboundary flows into the U.S. New connections prevent illegal flows into the Tijuana River and reduce the risk of contact with waterborne diseases. 	Significant Progress
Objective 2: Help drinking water and wastewater utilities in the border region to implement sustainable infrastructure practices to reduce operating costs, improve energy efficiency, use water efficiently and adapt to climate change.						
There are currently no active projects under this sub-objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Sub-objective 2a: Incorporate sustainable infrastructure elements, as feasible and appropriate, into U.S.-Mexico Border Water Infrastructure Program-supported in NADB-certified projects.						
There are currently no active projects under this sub-objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Sub-objective 2b: Improve energy efficiency and efficient water use at border drinking water and wastewater utilities.						
There are currently no active projects under this sub-objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						



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Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Sub-objective 2c: Build operational, managerial, and financial capacity at border drinking water and wastewater utilities through training.						
Collaborate with the National Association of Clean Water Agencies (NACWA)	NACWA, OOMAPAS, ADEQ	N/A	Gabriela Baeza-Castañeda (USEPA) baeza-castaneda.gabriela@epa.gov	<ul style="list-style-type: none"> Work in partnership with NACWA to find meaningful and effective means to build up utility capacity for disadvantaged border utilities. 	<ul style="list-style-type: none"> Increased capacity will allow utilities to better operate and manage facilities and equipment once projects are completed. Extend the life of project benefits. Pilot project in early stages of development in Arizona/Sonora 	Initial Progress
Objective 3: Work binationally to identify and reduce surface water contamination in specific high priority water bodies or watersheds.						
There are currently no active projects under this sub-objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Sub-objective 3a: Develop a binational watershed protection plan in the Lower Rio Grande below Falcon International Dam.						
Please refer to Action Plan provided by EPA Region 6.						
Sub-objective 3b: Every two years, identify and implement at least one project to reduce the level of heavy metals, sediment, and/or bacteria entering the Santa Cruz River and/or the Nogales Creek.						
There are currently no active projects under this sub-objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Sub-objective 3c: Every two years identify and implement at least one project to reduce the levels of bacteria, biochemical oxygen demand (BOD), trash, and/or phosphates entering the New River.						
Mexicali wastewater collection improvements	USEPA, NADB, CESPM	BEIF (USEPA) Approximately \$3.95M in BEIF, ~\$11.3M total cost	Gabriela Baeza-Castañeda (USEPA) baeza-castaneda.gabriela@epa.gov	<ul style="list-style-type: none"> Rehabilitation of wastewater pipelines and small lift stations adjacent to New River, susceptible to collapses and wastewater discharge onto river channel 	<ul style="list-style-type: none"> Project was certified in May 2020 and will move forward to construction. Mitigate transboundary flows entering U.S. via New River 	Significant Progress



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Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Niland Wastewater Treatment Plant	USEPA, NADB, US Department of Agriculture (USDA)	Project Development Assistance Program (USEPA/NADB) \$340,750	Roberto Molina (NADB) rmolina@nadb.org	<ul style="list-style-type: none"> • Planning and design of existing wastewater treatment plant that does not meet permit requirements for E-coli, copper, TSS, BOD. • Will improve quality of Waste Water Treatment Plant (WWTP) discharges into the New River and the Salton Sea. 	<ul style="list-style-type: none"> • Project will be construction-ready but not certified • Complete final design. 	Significant Progress
<i>Sub-objective 3d: Every two years identify and implement at least one project to reduce the level of bacteria, sediment, and/or trash that enters the Tijuana River.</i>						
Reduce use of single-use plastic through a city-wide educational campaign	USEPA, NADB, Southwest Wetlands Interpretive Association (SWIA)	USEPA/NADB Border Program: \$91,286	Emily Pimentel (USEPA) pimentel.emily@epa.gov	<ul style="list-style-type: none"> • Collaborate with key environmental and business stakeholders in Tijuana, Tecate, and Mexicali, and the State of Baja California to advance educational campaign on the harmful impacts of single-use plastic • Provide technical support to cities and state government to draft legislation and regulation. • Advise and support business practices to reduce single-use plastic bags. 	<ul style="list-style-type: none"> • Launched city-wide educational campaign (SWIA grantee) to reduce use of single-use plastic bags in Tijuana convenience stores, achieving international awareness through 59 press and social-media outlets and 12 radio-television events. • Advised and supported businesses and government to reduce single-use plastic bags, supported by 230 student volunteers donating 7,300 reusable bags. • Collaborated with border cities and states to draft legislations to reduce single-use plastic bags 	Deliverable Achieved



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Goal 2 – Improve Access to Clean and Safe Water						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Tijuana River Diagnostic	USEPA, NADB, IBWC, Comisión Estatal de Servicios Públicos de Tijuana (CILA), CESPT	BEIF (USEPA): \$250,000	Doug Liden (USEPA) (liden.douglas@epa.gov)	<ul style="list-style-type: none"> Determine cost and benefit of alternatives in both infrastructure and operations and maintenance in both US and Mexico to reduce transboundary flows of wastewater in Tijuana River 	<ul style="list-style-type: none"> Analysis identified cost-effective solutions to expedite much needed projects. Information on the finding presented at several community stakeholders' meetings in San Diego, city of Coronado, and Imperial Beach. 	Deliverable Achieved
Build community solutions to reduce land-based sources of plastic impacting the Tijuana River Estuary, using toolkits to engage citizen scientists in Tijuana and Rosarito	Commission for Environmental Cooperation (CEC), USEPA, SEMARNAT	CEC: \$200,000	Emily Pimentel (USEPA) pimentel.emily@epa.gov Doug Liden (USEPA) Liden.doug@epa.gov	<ul style="list-style-type: none"> Hold binational workshop to identify diverse actions to reduce sources of land-based marine litter in the Tijuana watershed. Develop educational campaign on land-based sources of marine litter and actions to reduce them. 	<ul style="list-style-type: none"> WildCoast in collaboration with CEC completed workshop May 2018, resulting in a report "State of Marine Litter in Southwestern San Diego County" (Feb 2019) on solutions to reduce land-based sources of marine litter. CEC completed educational outreach campaign including video on land-based sources of marine litter and actions to reduce impacts in Canada, Mexico and the United States. 	Deliverable Achieved
Prevent future major collapse of a wastewater collector that carries up to 177 l/s	USEPA, NADB, National Water Commission (CONAGUA) CESPT	BEIF (USEPA): Approximately \$3M (\$1M from USEPA)	Doug Liden (USEPA) liden.douglas@epa.gov	<ul style="list-style-type: none"> Rehabilitated wastewater pipelines in Tijuana, Mexico 	<ul style="list-style-type: none"> Prevent further transboundary flows into the United States. Project under construction 	Moderate Progress
Objective 3-other: Initiatives to reduce water contamination in other watersheds and/or water bodies						
There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						



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Goal 2 – Improve Access to Clean and Safe Water						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Objective 4: Provide the public with timely access to water quality data in binational water bodies and watersheds in a readily understandable, web-based format.						
Sub-objective 4a: Develop a binational website that displays timely information on beach advisories on both sides of the border in the Brownsville/Matamoros area, and ensure its operation through 2020.						
Please refer to Action Plan provided by EPA Region 6. Past action plans are available at https://www.epa.gov/border2020/tx-coah-nl-taum-workgroup-overview						
Sub-objective 4b: Develop a binational website that displays timely information on beach advisories on both sides of the border in the San Diego/Tijuana area, and ensure operation of website through 2020.						
Use of genetic markers to track level and source of human bacteria in ocean of Imperial Beach, CA	USEPA, California State Water Board	USEPA CWA Section 106 grant money: \$155,000	Doug Liden (USEPA) liden.douglas@epa.gov	<ul style="list-style-type: none"> Digital droplet polymerase chain reaction (ddPCR): measures both E-coli and a genetic marker for a bacterium found in human feces. Next-generation DNA sequencing to produce bacterial community fingerprints from point discharges of sewage in Mexico. Will work with NGOs such as Surfrider and WildCoast to determine sampling locations and times (during south swell). 	<ul style="list-style-type: none"> Project is ongoing. 	Moderate Progress
Further development of nearshore plume tracking model for Imperial Beach	USEPA, NADB, UCSD Scripps Institute	USEPA/NADB Border Program \$87,556	Doug Liden (USEPA) liden.douglas@epa.gov	<ul style="list-style-type: none"> Will model February 2017 spills from 25 MG to 250 MG. Outputs will be delivered via a SCCOOS real-time web interface. UCSD - Scripps Institute to work on furthering the model application 	<ul style="list-style-type: none"> Model demonstrated the spill impacting the CA/Baja CA regions. Information on the finding presented in the communities of Imperial Beach, City of Coronado, and San Diego, California Project completed Phase II being considered for future funding 	Deliverable Achieved



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Goal 2 – Improve Access to Clean and Safe Water						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
<i>Sub-objective 4c: Develop a binational website that displays timely information on water quality in high-priority watersheds including the Lower Rio Grande, the New River, and the Tijuana River and ensure operation of website through 2020.</i>						
Increase monitoring of Tijuana River on both sides of the border	IBWC, CILA, CONAGUA	IBWC: TBD	Carlos Peña (IBWC) carlos.pena@ibwc.gov	<ul style="list-style-type: none"> Water Quality Map Application. Monitoring Station Water Quality Data. 	<ul style="list-style-type: none"> Site is partially complete Online posting of South Bay Water Quality data and New River. Rio Grande data is online (separate link). Plan is to incorporate all these under “Water Quality” once new servers are online later in 2020. Tijuana River data and a report due by March 31st to include water quality data for 2019 in both the U.S. and Mexico for the Tijuana River. 	Moderate Progress



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Goal 3- Promote Materials Management, Waste Management and Clean Sites						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Objective 1: By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.						
There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.						
Framework for monitoring marine debris extent and vegetation impacts	4-Walls, in collaboration with UC Irvine	USEPA/NADB Border Program \$69,200 Leverage: \$86,000	Emily Pimentel (USEPA), pimentel.emily@epa.gov	<ul style="list-style-type: none"> Using drone technology, map and quantify and estimate baseline conditions (pre-storm) and post-storm binational trash flow, type and quantities, in Tijuana and assess vegetation impacts of trash in the Tijuana River National Estuarine Research Reserve (TRNERR) Develop drone technology based predictive tool to estimate binational trash flow. Develop project quality assurance project plan (QAPP) associated with field work. 	<ul style="list-style-type: none"> USEPA approved QAPP (March 2019). Drone-based protocol to predict trash flow types and quantities from baseline conditions. Assessment of trash impacts on vegetation in the TRNERR. 	Initial Progress



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Goal 3- Promote Materials Management, Waste Management and Clean Sites

Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Expected Results	Status
Reduce use of single-use plastic through a city-wide educational campaign	USEPA, NADB: Southwest Wetlands Interpretive Association (SWIA)	USEPA/NADB Border Program \$91,286 Leverage: \$204,000	<p>Emily Pimentel (USEPA) pimentel.emily@epa.gov</p> <p>Ana Eguiarte aeguiarte@trnerr.org</p>	<ul style="list-style-type: none"> Collaborated with key environmental and business stakeholders in Tijuana, Tecate, and Mexicali, and the State of Baja CA to advance educational campaign on the harmful impacts of single-use plastic Provide technical support to cities and state government to draft legislation and regulation. Advise and support business practices to reduce single-use plastic bags. 	<ul style="list-style-type: none"> Launched city-wide educational campaign (SWIA grantee) to reduce use of single-use plastic bags in Tijuana convenience stores, achieving international awareness through 59 press and social-media outlets and 12 radio-television events. Advised and supported businesses and government to reduce single-use plastic bags, supported by 230 student volunteers donating 7,300 reusable bags. Collaborated with border cities and states to draft legislations to reduce single-use plastic bags 	Deliverable Achieved

Objective 3: By 2020, improve knowledge at every level of government (federal, state, local) to characterize and remediate contaminated sites.

There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: <https://www.epa.gov/border2020/region-9-action-plans>

Objective 4: On an annual basis, implement the Binational Consultative Mechanism on sharing information on border area hazardous waste facilities.



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Goal 3- Promote Materials Management, Waste Management and Clean Sites						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Implement the Consultative Mechanism to exchange information on hazardous waste treatment, storage, and disposal (TSD) facilities and spent lead-acid batteries and electronic recycling facilities	USEPA, SEMARNAT, and US and MX border states	USEPA, SEMARNAT and border states: in-kind	Carlo Rodriguez (DTSC) Emily Pimentel (USEPA) Pimentel.emily@epa.gov	<ul style="list-style-type: none"> Complete the binational exchange of information per the Consultative Mechanism. 	<ul style="list-style-type: none"> All US border states, including DTSC provided the information per the Consultative Mechanism in 2019. Waiting for SEMARNAT to provide information. 	Moderate Progress



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Goal 4- Enhance Joint Preparedness for Environmental Response						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Objective 1: Update as necessary, the current Mexico-US Joint Contingency Plan and on an annual basis, continue to evaluate and update the emergency notification mechanism between Mexico and the United States.						
Update Joint Contingency Plan	USEPA, Proteccion Civil	None	Eugene Lee (USEPA), 202-564-7988, lee.eugene@epa.gov	<ul style="list-style-type: none"> Emergency notification mechanism between Mexico and the United States. 	<ul style="list-style-type: none"> Updated JCP. 	Deliverable Achieved
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.						
Update at least one of the two sister city emergency plans	USEPA, Proteccion Civil, County of San Diego, County of Imperial, CALEPA, California Office of Emergency Services (CalOES)	TBD	Bill Jones (USEPA) Jones.bil@epa.gov	<ul style="list-style-type: none"> Sister City Plans establish the policies, responsibilities, and procedures required to protect the health and safety of the populace, the environment, and public and private property from the effects of any incident. 	<ul style="list-style-type: none"> Update all hazards Sister City plans. 	Moderate Progress
Objective 3: By 2020, the US-Mexico JRT will make available technical outreach and training materials for distribution and dissemination along the border.						
Train Baja California first responders	USEPA, Proteccion Civil, County of San Diego, County of Imperial, CAEPA, CalOES,	USEPA	Bill Jones (USEPA) Jones.bil@epa.gov	<ul style="list-style-type: none"> Provide first responder awareness, first responder operations, traffic incident management system and incident command system training 	<ul style="list-style-type: none"> Increased ability to efficiently and effectively respond to incidents. 	Significant Progress
Blended Emergency Response Exercises for Maquiladora Clusters	ASU, NADB, USEPA, ITM, Protección Civil, Maquiladora Assn & Industry, and Fire Departments.	USEPA/NADB Border Program \$60,000	Bill Jones (USEPA) Jones.bil@epa.gov	<ul style="list-style-type: none"> Training for industry, academia, first responders and emergency management departments. 	<ul style="list-style-type: none"> Enhance joint preparedness for environmental and emergency response 	Moderate Progress



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Goal 4- Enhance Joint Preparedness for Environmental Response						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
<i>Objective 4: By 2020, the US-Mexico JRT will analyze existing agreements (including sister city plans) that allow trans-boundary movement of equipment and personnel for comparison purposes.</i>						
Review and comment on at least one of the two sister city emergency plans	USEPA, Protección Civil	None	Eugene Lee (USEPA) 202-564-7988, lee.eugene@epa.gov	<ul style="list-style-type: none"> Comments on draft updates to Sister City Plan updates. 	<ul style="list-style-type: none"> Updated plans that reflect consistency borderwide. 	Moderate Progress



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Goal 5- Enhance Compliance Assurance and Environmental Stewardship						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results	Status
Objective 1: By 2020, strengthen effective information sharing between US and Mexican agencies regarding the movement of hazardous waste across the border and its ultimate treatment or disposal. In addition, ensure that land ports of entry have sufficient inspection capacity to police hazardous shipments.						
On an annual basis, conduct inspections at the California Port-of- Entry (POE) and workshops on compliance assistance among importers/exporters in the California/Baja California region	USEPA, CA Department of Toxics Substance Control (DTSC), San Diego County HazMat unit, and Mexican federal, state and local agencies	RCRA grant: Approx. \$100,000	Carlo Rodriguez (DTSC) crodrig1@dtsc.ca.gov	<ul style="list-style-type: none"> For FY19, DTSC and San Diego County conduct north-bound port of entry inspections at Otay Mesa and Calexico (Fridays) in collaboration with the U.S. Customs and Border Protection (CBP) and south-bound inspections. Conduct compliance assistance workshops in Tijuana. 	<ul style="list-style-type: none"> In FY19, DTSC and San Diego County conducted north-bound and south-bound inspections, including enforcement actions involving scrap vehicle transport and used oil releases. These inspections will continue in FY20. Compliance assistance workshops planned for June 2020 are postponed into late 2020 	Significant Progress
Objective 2: By 2020, in Mexico, increase by 25 percent the number of businesses in the border region enrolled in the National program for Environmental Auditing (PNAE) and/or similar programs at the state level for facilities not regulated by the federal government, using 2012 as a baseline.						
There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Objective 3: Using the U.S. Toxic Release Inventory (TRI) and the Mexican Registry of Emissions and Transfers of Pollutants (RETC), along with other sources of environmental information, share information regarding activities contributing pollution to trans-boundary air and/or water basins along the border.						
There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
Objective 4: By 2020, implement at least five (5) binational workshops targeted to environmental enforcement professionals, including port-of-entry customs professionals, to promote the exchange of information and improve understanding of each country's respective compliance and enforcement programs and tools, including field inspection and case development practices.						
There are currently no active projects under this objective for the 2019-2020 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Expected Results	Status
<i>Air quality and asthma actions</i>						
Environmental Justice Program - The Climate-ready Healthy Homes Campaign	Groundwork San Diego-Chollas Creek	USEPA \$30,000	Alheli Baños-Keener (USEPA) Banos.Alheli@epa.gov	<ul style="list-style-type: none"> Will engage low-income youth in the Encanto community located in southeast San Diego to understand and improve residential indoor air quality. Groundwork will partner with the Millennial Tech Middle School to integrate air quality into the school's science curriculum and then enlist 20 students as Healthy Home Ambassadors to do outreach on indoor air quality to fellow students, families and the community Will educate and empower the Encanto community to improve indoor air quality for themselves and others. 	<ul style="list-style-type: none"> 600 families received in-home air quality information and educational materials; health survey (400 middle school mailings; 200 community planning groups) 20 families request/receive home visits, audits, remediation advising 20 high risk families receive above plus monitoring equipment 40 families receive follow up visit/report Track percentage of families acting individually or at neighborhood scale 	Significant Progress
Air Quality Flag Program	USEPA	USEPA: Staff time	Idalia Pérez (USEPA) Perez.idalia@epa.gov	<ul style="list-style-type: none"> Promote air quality awareness in communities. Provide technical assistance, funds to purchase air quality flags and outreach materials. Alerts organizations to the local air quality forecast and helps them to take actions to protect people's health, including those with asthma. 	<ul style="list-style-type: none"> Provide 10 sets of flags, accompany outreach materials in Spanish and technical support to implement the program in schools to Redspira in Mexicali. Provide a set of air quality flags and accompanying outreach material to the Jamul Indian Village tribe. 	Deliverable Achieved



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Expected Results	Status
<i>Integrated pest management and pesticide exposure actions</i>						
Build awareness on Pesticide exposure and ways to prevent and/or report it	California Employment Development Department (EDD), USEPA, Imperial County Agricultural Commissioner's Office	Staff Time	Fabiola Estrada (USEPA) Jessica Helgesen (USEPA) Helgesen.Jessica@epa.gov	<ul style="list-style-type: none"> Attend events for bilingual outreach such as the 38th and 29th Annual Farmworker Appreciation Breakfast with resources on workers protection standards and safety. Build awareness of pesticide safety and ways to prevent pesticide illness/injury and where to report it as we build trust with key stakeholders. Facilitate access to information and provide in English and Spanish 	<ul style="list-style-type: none"> On December 6, 2019 EPA joined the Imperial County Agricultural Commissioner and the California Department of Pesticide Regulation in Calexico, CA for the 40th annual farmworker appreciation breakfast organized by the California EDD with 2,000+ participants. USEPA provided Worker Protection Standard and general pesticide safety information USEPA staff contributed socks for farmworkers. 	Deliverable Achieved
<i>Multi-topic environmental health actions (IPM, IAQ, vector-borne, asthma-related, lead poisoning, children's health, Healthy Homes, etc.)</i>						
Participate in Imperial Valley Environmental Justice (EJ) Task Force Meetings to address/resolve identified issues	USEPA, CCV, DTSC, EJ Task Force, CARB, IID, ICAPCD, CA Water Boards	Staff time	Jessica Helgesen (USEPA) Helgesen.jessica@epa.gov	<ul style="list-style-type: none"> As needed refer comments to USEPA specific staff. Encourage USEPA staff to participate depending on agenda items. Ongoing. 	<ul style="list-style-type: none"> Shared information about new Border program and 2019 RFP. 	Moderate Progress



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Expected Results	Status
Expand knowledge on Border 2020 and increase Environmental Health Awareness in the California- Baja California border region	USEPA (Border, Children's Environmental Health, ATRIA)	Staff time	Jessica Helgesen (USEPA) Helgesen.jessica@epa.gov	<ul style="list-style-type: none"> Conduct outreach to border communities on environmental health Ongoing. 	<ul style="list-style-type: none"> On May 4th, 2019, USEPA conducted an outreach booth at Campo Tribe's Environmental Fair, on a variety of topics as the Border 2020 Program, healthy homes, safer choice, children's health and integrated pest management – reaching 50, border-tribal stakeholders On March 14 and June 6th of 2019 and March 12, 2020, presented at the University California San Diego for an Environmental and Occupational Health Panel to approximately 80 graduating seniors on USEPA's mission, the Border 2020 Program, how USEPA staff works on environmental health topics, and the various ways students can enter federal government service Fall of 2019 USEPA presented at the Sustainability Has No Borders event, sharing on Federal Job Opportunities and Border 2020 to San Diego State University students and faculty (~ 50 people) 	Moderate Progress



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Expected Results	Status
Expand knowledge on Border 2020 and increase Environmental Health Awareness at the Face-to-Face meeting with tribes located along the US-MX border	USEPA, the Native American Environmental Protection Coalition, Border Tribes	Staff time USEPA (ATRIA, USMX Border, Indian Environmental Assistance Program (GAP))	Jessica Helgesen (USEPA) Helgesen.jessica@epa.gov Alheli Baños-Keener (USEPA) Banos.Alheli@epa.gov	<ul style="list-style-type: none"> Collaborated with Region 9 Indoor Environment Team to provide a preview on environmental health presentation such as environmental triggers of asthma 	<ul style="list-style-type: none"> On September 12, 2019. Discussed Request for Proposal, extension of program and more tribal involvement. Approximately 25 people participated in the session, which included information on how to incorporate environmental health capacity building activities into workplans funded by USEPA's General Assistance Grant Program. 	Deliverable Achieved
2019 Border Public Health Symposium	San Diego Border Health Collaborative and San Diego State University	Staff time	Justine Kozo Justine.Kozo@sdcounty.ca.gov April Fernandez April.Fernandez@cdph.ca.gov	<ul style="list-style-type: none"> Provide a Border Public Health Symposium to San Diego County 	<ul style="list-style-type: none"> 128 number of attendees ranging from county, state, and federal agencies as well as students, faculty, community members, non-profits and other key stakeholders. Topics ranged from air monitoring, environmental justice, water quality and other important public health challenges in the US-MX Border Region- California/Baja California. 	Deliverable Achieved