



California-Baja California 2017-2018 Border 2020 Action Plan



Goal 1 – Reduce Air Pollution						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Results	Progress
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.						
Implement a vehicle inspection program (smog emissions) in Baja California	Secretaría de Protección al Ambiente (SPA)	SPA: Staff time	Saúl Guzmán (SPA) sguzmang@baja.gob.mx	<ul style="list-style-type: none"> Implement vehicle inspection program (smog emissions) in Baja California. 	<ul style="list-style-type: none"> Program contributed to the verification of 40% of the vehicle fleet registered in the state of Baja California. Vehicles that comply, contaminate 25% less than those that do not. 	Significant 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 SPA	EPA, ICAPCD: \$50,000	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us	<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. 	Significant Progress
Media Outreach of Air Quality Index (AQI) website to educate the community where they can obtain daily air quality information (Phase 1)	Imperial County Air Pollution Control District (ICAPCD), Air Quality Task Force, and SPA	EPA, ICAPCD: \$40,000	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us	<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. Results of AQI outreach: -In 2018 there were 3002 subscribers. 	Significant Progress



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Media Outreach of Air Quality Index (AQI) website to educate the community where they can obtain daily air quality information (Phase 2)	Imperial County Air Pollution Control District (ICAPCD), Air Quality Task Force, and SPA	EPA, ICAPCD: \$50,000	Belen Leon (ICAPCD) belenleon@co.imperial.ca.us	<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. 	Significant Progress
Develop a PM _{2.5} State Implementation Plan (SIP) for Imperial County	Imperial County Air Pollution Control District, EPA, CARB	Participating Agencies staff time	Reyes Romero (ICAPCD) reyesromero@co.imperia.ca.us Monica Soucier (ICAPCD) monicasoucier@co.imperial.ca.us	<ul style="list-style-type: none"> Submit a PM_{2.5} SIP demonstrating reductions in PM_{2.5} emissions in Imperial County. 	<ul style="list-style-type: none"> Plan approved by Imperial County Board of Directors April 24, 2018. CARB Board approval on May 25, 2018. CARB forward Final SIP to EPA on July 16, 2018. EPA Region IX Completeness Determination March 19, 2019 – under EPA review. 	Deliverable Achieved
Develop a PM ₁₀ State Implementation Plan (SIP) for Imperial County	Imperial County Air Pollution Control District, EPA, CARB	Participating Agencies staff time	Reyes Romero (ICAPCD) reyesromero@co.imperia.ca.us Monica Soucier (ICAPCD) monicasoucier@co.imperial.ca.us	<ul style="list-style-type: none"> Submit a PM₁₀ SIP demonstrating reductions in PM₁₀ emissions in Imperial County. 	<ul style="list-style-type: none"> Plan approved by Imperial County Board of Directors October 23, 2018. CARB Board approved on December 13, 2018. CARB forwarded the Final SIP to EPA Region IX February 6, 2019. – Under EPA review. 	Deliverable Achieved
Develop an ozone State Implementation Plan (SIP) for Imperial County.	Imperial County Air Pollution Control District, EPA, CARB	Participating Agencies: Staff time	Reyes Romero (ICAPCD) reyesromero@co.imperia.ca.us Monica Soucier (ICAPCD) monicasoucier@co.imperial.ca.us	<ul style="list-style-type: none"> Submit an Ozone SIP demonstrating reductions in Ozone emissions in Imperial County. 	<ul style="list-style-type: none"> Plan approved by ICAPCD Board October 26, 2017. CARB submitted plan to U.S. EPA on November 14, 2017. 	Deliverable Achieved



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Salton Sea Soil Emissivity Study	EPA, CARB, ICAPCD, Imperial Irrigation District	EPA: \$100,000	Earl Withycombe (CARB) earl.withycombe@arb.ca.gov Belen Leon (ICAPCD) belenleon@co.imperial.ca.us	<ul style="list-style-type: none"> • Salton Sea exposed playa and off-playa undeveloped lands will be tested to: <ul style="list-style-type: none"> ○ Provide more accurate and local soils/playa emissions factors for improvement of windblown dust emission inventories. ○ Assess the effectiveness of stabilized soil certification enforcement methods contained in ICAPCD Regulation VIII. 	<ul style="list-style-type: none"> • Purchased and received PI-SWERL. • Several ICAPCD staff trained on testing protocols and use of instrument. Emissivity tests conducted at 5+ sites on western desert in Imperial County. 	Deliverable Achieved
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, EPA, 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. 	Moderate Progress
Maintain the real-time reporting website for Imperial County Air Quality Monitoring Network	CARB, EPA, ICAPCD	EPA: \$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/ 	Moderate Progress
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 at: https://www.arb.ca.gov/html/ds.htm 	Moderate Progress



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Operate and maintain PM _{2.5} air quality monitor at the San Ysidro Port of Entry (Phase II)	SDAPCD, EPA, GSA, CBP	SDAPCD, EPA: \$70,000	Bill Brick (SDAPCD) Bill.Brick@sdcounty.ca.gov Laura Lawrence (EPA) lawrence.laura@epa.gov	<ul style="list-style-type: none"> Improved understanding of PM_{2.5} emissions originating from passenger vehicles crossing San Ysidro Port of Entry. 	<ul style="list-style-type: none"> Monitoring sites identified have all failed to reach use agreement. Search continues for workable site. 	Moderate Progress
Operate and maintain PM _{2.5} air quality monitor at the Otay Mesa Port of Entry	SDAPCD, EPA, GSA, CBP	SDAPCD, EPA: \$75,000	Bill Brick (SDAPCD) Bill.Brick@sdcounty.ca.gov Laura Lawrence (EPA) 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"> Work underway to identify monitoring site. 	Initial Progress
Install and operate PM _{2.5} air quality monitors at two locations in Mexicali for a period of two years.	CARB, EPA, SPA	CARB, EPA: Staff time and maintenance costs	Fernando Amador (CARB) fernando.amador@arb.ca.gov	<ul style="list-style-type: none"> The Ambient Air Quality Monitoring Study in Mexicali for PM_{2.5} to be completed for April 2018. Submit PM_{2.5} mass and meteorological to AQS. Finalize a transport study and submit to SPA and EPA. 	<ul style="list-style-type: none"> All targeted outputs implemented. Monitoring phase completed. Final report completed and submitted to SPA and EPA. 	Deliverable Achieved
Continued support of the Baja California Air Monitoring Network	CARB	CARB, SPA, EPA: Lab time and materials	Fernando Amador (CARB) fernando.amador@arb.ca.gov	<ul style="list-style-type: none"> Ongoing support of PM₁₀ filter analysis and reporting. Certification of SPA's calibration standards at the Sacramento lab. 	<ul style="list-style-type: none"> Ongoing support of PM₁₀ filter analysis and reporting, Certification of SPA calibration standards at the Sacramento lab. 	Significant Progress
Baja Network Audit Support	CARB, SPA	CARB, EPA: Staff time	Fernando Amador (CARB) fernando.amador@arb.ca.gov	<ul style="list-style-type: none"> On June 2018, CARB to participate on audits performed on SPA's air monitoring stations. Audit to ensure proper functioning of the equipment. Using CARB methodology, the audit also trained INECC staff on probe performance audits. 	<ul style="list-style-type: none"> All targeted outputs implemented. Training of INECC staff with participation by SPA staff on conducting performance audits of air monitoring stations in Tijuana, Tecate and Mexicali. Training was done on June 2018. 	Deliverable Achieved



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Toxics monitoring of windblown dust from Salton Sea exposed playa.	EPA, CARB, IID	EPA: \$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, currently being analyzed for toxic elements (as of May 21, 2019). 	Significant Progress
San Ysidro Port-Of-Entry Community Air Study	University of Washington, CalEPA, San Diego State University, Casa Familiar Universidad Autónoma de Baja California	EPA/NADB: \$99,935	Dr. Edmund Seto (UW) eseto@uw.edu Jorge Hernandez (NADB) jhernandez@nadb.org Jeremy Bauer (EPA) bauer.jeremy@epa.gov	<ul style="list-style-type: none"> Improve understanding of the spatial extent of pollutant levels near the San Ysidro Port of Entry. Increase awareness of the meteorological conditions episodes associated with air pollution on both sides of the border. Increase awareness of the relationship between border wait times and pollutant levels. 	<ul style="list-style-type: none"> Project is 57% completed. Team confirmed the availability of monitor locations through site visits. Additional monitoring time has been requested by Sponsor. University of WA will discuss the results of monitor calibration work during the advisory meeting in January of 2019 and will get feedback from the group on the data being collected. The launch of the new website will provide access to the data in Spanish. 	Significant Progress
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 2017-2018 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.						



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Improve energy efficiency of the public lighting system in Playas de Rosarito. Increase and improve street paving coverage and roadway city infrastructure	NADB, 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"> • Replacement of street lamps to LED, reduce electricity consumption. • Reduced dust from unpaved streets. 	<ul style="list-style-type: none"> • Public lighting is pending. Bid process is expected by 3Q 2018. • Paving works are completed. 	Significant Progress
Installation of energy-efficient LED lights in Mexicali, Tecate, Tijuana, and Ensenada, Baja CA	Municipalities of Mexicali, Tecate, Tijuana, and Ensenada	Municipalities of Mexicali, Tecate, Tijuana, and Ensenada: TBD	Margarito Quintero Núñez mquinteron@baja.gob.mx	<ul style="list-style-type: none"> • Number of LED bulbs installed. 	<ul style="list-style-type: none"> • Replacement of 9,600 sodium vapor bulbs with LED bulbs in Municipality of Mexicali, with estimated monthly savings of 800,000 thousand pesos. 	Significant Progress



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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 Output	Results	Progress
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 2017-2018 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 Primary Lines	EPA, CESPT, CONAGUA, NADB	\$7 M total (\$3 from US and \$4 from MX)	Doug Liden (EPA) liden.douglas@epa.gov	<ul style="list-style-type: none"> 10 km of rehabilitated collectors, 30 rehabilitated manholes, 420 new 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. 	Deliverable Achieved
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.						
Sub-objective 2a: Incorporate sustainable infrastructure elements, as feasible and appropriate, into U.S.-Mexico Border Water Infrastructure Program-supported in NADB-certified projects.						
Holtville Wastewater Treatment Plant	EPA, CESPT, NADB	\$5.8 M total	Gabriela Baeza-Castañeda baeza-castaneda.gabriela@epa.gov	<ul style="list-style-type: none"> Installation of high efficiency aeration chains on rehabilitated Waste Water Treatment Plant. 	<ul style="list-style-type: none"> Completed in 2017. Estimated population benefitted: 6500+ Increased connections reduce the probabilities of contact with waterborne illnesses. Improved Waste Water Treatment Plant discharge will in turn benefit water quality in the Salton Sea. 	Deliverable Achieved
Sub-objective 2b: Improve energy efficiency and efficient water use at border drinking water and wastewater utilities.						



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There are currently no active projects under this sub-objective for the 2017-2018 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
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)	EPA, NACWA	N/A	Gabriela Baeza-Castañeda (EPA) 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. As of April 2019, NACWA has reaffirmed to OWM its interest in working with border wastewater utilities. 	<ul style="list-style-type: none"> On-going coordination with OWM and Region 9. Increased capacity will allow utilities to better operate and manage facilities and equipment once projects are completed. Extend the life of project benefits. 	Moderate Progress
Objective 3: Work binationally to identify and reduce surface water contamination in specific high priority water bodies or watersheds.						
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.						
Please refer to Arizona/Sonora 2017-2018 Action Plan						
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 emergency equipment purchase	EPA, NADB	BEIF (EPA): \$330,000	Doug Liden (EPA) liden.douglas@epa.gov	<ul style="list-style-type: none"> Purchase three trailer-mounted pumps and eight inflatable sewage pipe plugs. 	<ul style="list-style-type: none"> Purchase of equipment is complete and installed. Will help prevent bypasses or raw sewage to New River during infrastructure work. Increased utility preparedness for unforeseen wastewater overflows. 	Deliverable Achieved



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Niland Wastewater Treatment Plant	EPA, NADB, USDA	Project Development Assistance Program (EPA/NADB) \$340,750	Alejandra Nuñez (NADB) anunez@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. discharges into the New River and the Salton Sea. 	<ul style="list-style-type: none"> • Niland County Sanitation District formed, finalized transfer in Sept. 2018. • Sewer rate approved and applied. • Final Design in progress. 	Moderate 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	EPA, NADB, Southwest Wetlands Interpretive Association (SWIA)	Border 2020 (EPA): \$91,286	Emily Pimentel (EPA) pimentel.emily@epa.gov	<ul style="list-style-type: none"> • Reduce plastic bag use by at least 1000 consumers, advancing state-wide voluntary program to reduce land-based sources of plastic. • Reduce plastic flow into the Tijuana River Estuary. 	<ul style="list-style-type: none"> • Launched outreach to raise awareness of plastics and reduce use of single-use plastic bags. • Engaged students and business in advancing use of reusable bags and eliminate single-use plastic bags. • Have expanded project to city of Mexicali, Baja CA. • To date: 6,380 reusable bags have been delivered to the population • Project is 60% complete. 	Moderate Progress
Collect and recycle scrap tires using new technologies applied in Tijuana, leveraging past Cal-EPA grant	EPA, Cal-EPA	Border 2020 (EPA): \$76,000	Emily Pimentel (EPA) pimentel.emily@epa.gov	<ul style="list-style-type: none"> • Collect and recycle 25,000 scrap tires. Reduce tire flow into the Tijuana River Estuary. 	<ul style="list-style-type: none"> • Project cancelled. 	No Progress



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Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Results	Progress
Tijuana River Diagnostic	EPA, NADB, IBWC, CILA, CESPT	BEIF (EPA): \$250,000	Doug Liden (EPA) 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"> Report expected June of 2019. Analysis will identify cost-effective solutions that will expedite much needed projects. 	Significant Progress
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	CEC, EPA, SEMARNAT	Commission for Environmental Cooperation (CEC): \$200,000	Emily Pimentel (EPA) pimentel.emily@epa.gov Doug Liden (EPA) Liden.doug@epa.gov	<ul style="list-style-type: none"> Engage citizen scientists in implementing solutions to reduce land-based sources of plastic, Reduce marine litter flowing into the Tijuana River Estuary and the Pacific Ocean. 	<ul style="list-style-type: none"> Completed community solutions workshop on May 4, 2018 in Imperial Beach. Draft report March 2019 on community solutions to reduce land-based plastic trash. 	Significant Progress
Prevent future major collapse of a collector that carries up to 177 l/s	EPA, NADB, CONAGUA, CESPT	BEIF (EPA): Approximately \$3M (\$1M from EPA)	Doug Liden (EPA) liden.douglas@epa.gov	<ul style="list-style-type: none"> Certify and begin construction on a project to rehabilitate 4 km of a major Tijuana collector. 	<ul style="list-style-type: none"> Project is under construction. Collector rehabilitation helps mitigate transboundary flows into the U.S. 	Significant 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 2017-2018 cycle. Past action plans are available at: https://www.epa.gov/border2020/region-9-action-plans .						
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.						



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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 Output	Results	Progress
<i>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.</i>						
Use of genetic markers to track level and source of human bacteria in ocean off Imperial Beach, CA	EPA, California State Water Board	EPA CWA Section 106 grant money: \$155,000	Doug Liden (EPA) 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 initiated, and kick-off meeting held June 2018. Project is ongoing. 	Initial Progress
Further development of nearshore plume tracking model for Imperial Beach	EPA, NADB, UCSD Scripps Institute	Border 2020 (EPA): \$87,556	Doug Liden (EPA) 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. 	<ul style="list-style-type: none"> Project Initiated in January 2018 Finalized the model grid for San Diego/Tijuana and Tijuana River Estuary; San Diego Bay, and San Antonio de los Buenos Outfall (10km South of border). Presented update to community stakeholders in June 2019. 	Significant Progress
<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	Steve Smullen (IBWC) steve.smullen@ibwc.gov	<ul style="list-style-type: none"> Add three additional monitoring stations to Tijuana River in U.S. and three stations in Tijuana. 	<ul style="list-style-type: none"> Update pending. 	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	Results	Progress
Objective 1: By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable material management practices.						
E-waste Workshop on safe recycling practices and proposed model for sustainable e-waste markets in Mexicali and Baja CA	NADB, Fundación Hélice	NADB, IDB and Fundación Hélice: TBD	Tomas Prieto Jorge Hernandez (NADB) Jorge.hernandez@nadb.org	<ul style="list-style-type: none"> Collect e-waste and other recyclable materials. Host workshop on safe e-waste recycling. Conducted information gathering and outreach to the informal sector to promote safe practices and support for formal sector recycling business. 	<ul style="list-style-type: none"> In 2018 Fundación Hélice hosted international e-waste workshop with about 200 attendees in Mexicali. They launched “green points” recycling center in Mexicali, collecting 19 tons of e-waste, paper, and plastic for recycling. 	Deliverable Achieved
Solid Waste and Tire Management Workshop, November 2017	Cal-EPA, SPA	CalEPA: In-kind	Alejandro Rodarte (CalEPA) Alejandro.Rodarte@calepa.gov	<ul style="list-style-type: none"> Increase technical expertise on scrap tire markets and other solid waste. Reduce tire and trash flows into the binational Tijuana River Estuary. 	<ul style="list-style-type: none"> Completed workshop in October 2017. Completed report, "The flow of used tires from CA to Mexico and waste tire disposal issues in Baja CA and the adjacent area of Sonora," Nov. 2017. 	Deliverable achieved
Tire-flow Workshop, April 2017	Cal-EPA, SPA, San Diego State University	CalEPA: In-kind	Alejandro Rodarte (CalEPA) Alejandro.Rodarte@calepa.gov	<ul style="list-style-type: none"> Increase technical expertise on scrap tire markets. Reduce tire and trash flows into the binational Tijuana River Estuary. 	<ul style="list-style-type: none"> Completed tire flow workshop in Tijuana October 2017. 	Deliverable Achieved
Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.						



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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	Results	Progress
Create a "Green Network" to collect an estimated 19 tons of e-waste and other recyclable materials in Mexicali, Baja CA	Fundación Hélice	EPA, NADB: \$48,000	Myriam Serra (Fundación Hélice) Myriamserra@fundacionheliceac.com	<ul style="list-style-type: none"> Divert 19 tons of recyclable materials from illegal dumping and landfills. Reduce illegal dumping and improve public awareness on safe recycling practices. Host workshop on safe e-waste recycling. 	<ul style="list-style-type: none"> Fundación Hélice launched "green points" recycling center in Mexicali, collecting 19 tons of e-waste, paper, and plastic for recycling. Outreach campaign for collection network in draft. Fundación Hélice hosted international e-waste workshop with about 120 attendees in Mexicali. Project highly supported by key state officials in meeting the demands to recycle e-waste in the state of Baja California. 	Deliverable Achieved
Reduce use of single-use plastic through a city-wide educational campaign	EPA, NADB: Southwest Wetlands Interpretive Association (SWIA)	Border 2020 (EPA): \$91,286	Emily Pimentel (EPA) pimentel.emily@epa.gov Ana Eguiarte aeguiarte@trnerr.org	<ul style="list-style-type: none"> Launch outreach to raise awareness on impacts of plastics and reduce land-based sources of plastic trash. Reduce plastic bag use by at least 1000 consumers, advancing state-wide voluntary program to reduce land-based sources of plastic. Reduce plastic flow into the Tijuana River Estuary. 	<ul style="list-style-type: none"> Launch outreach to raise awareness of plastics and reduce use of single-use plastic bags. Engaged students and business in advancing use of reusable bags and eliminate single-use plastic bags. Have expanded project to city of Mexicali, Baja CA. To date: 6,380 reusable bags have been delivered to the population. Project is 60% complete. 	Moderate Progress
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 2017-2018 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 Output	Results	Progress
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	EPA, SEMARNAT, and US and MX border states	EPA, SEMARNAT and border states: in-kind	Carlo Rodriguez (DTSC) Emily Pimentel (EPA) Pimentel.emily@epa.gov	<ul style="list-style-type: none"> Facilitate public access to information on hazardous waste TSDs on the border. 	<ul style="list-style-type: none"> EPA Headquarters submitted report on CA facilities to SEMARNAT. EPA is waiting for report on Mexican facilities. 	Significant 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 Output	Results	Progress
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 emergency notification mechanism between Mexico and the United States	EPA, Protección Civil, San Diego County, Imperial County, PROFEPA	N/A	Bill Jones (EPA) Jones.bil@epa.gov	<ul style="list-style-type: none"> Updated mechanisms. 	<ul style="list-style-type: none"> Notification mechanism in place and exercised to ensure that it is operational. 	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	EPA, Protección Civil, San Diego County, Imperial County, PROFEPA	TBD	Bill Jones (EPA) Jones.bil@epa.gov	<ul style="list-style-type: none"> Completed plans. 	<ul style="list-style-type: none"> San Diego-Tijuana updated. Still need to update Imperial-Mexicali. 	Moderate Progress
Objective 3: By 2016, the US-Mexico JRT will make available technical outreach and training materials for distribution and dissemination along the border.						
Distribute technical outreach and training materials and provide HazMat technician refresher training	EPA, Protección Civil, San Diego County, Imperial County, PROFEPA	EPA Contract	Bill Jones (EPA) Jones.bil@epa.gov	<ul style="list-style-type: none"> Materials made available and distributed. HazMat Refresher Training delivered. 	<ul style="list-style-type: none"> Materials disseminated and HazMat Refresher Training Delivered July and September 2017. 	Deliverable Achieved
Objective 4: By 2016, the US-Mexico JRT will analyze existing agreements (including sister city plans) that allow trans-boundary movement of equipment and personnel for comparison purposes.						



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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 Output	Results	Progress
Analyze existing agreements that allow trans-boundary movement of equipment and personnel	EPA, Protección Civil, San Diego County, Imperial County, PROFEPA	N/A	Bill Jones (EPA) Jones.bil@epa.gov	Existing agreements analyzed.	<ul style="list-style-type: none"> • Agreements have been assessed and the determination made that local solutions work best. Douglas – Agua Prieta and Imperial County – Mexicali are examples. 	Deliverable Achieved



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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 Output	Actual Results	Progress
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.						
Conduct inspections at the CA Port-of-Entry (POE) and workshops on compliance assistance among importers/exporters in the California/Baja California region	CA DTSC, San Diego County HazMat unit, and Mexican federal, state and local agencies	RCRA grant: Approx. \$100,000	Carlo Rodriguez (DTSC)	<ul style="list-style-type: none"> Conduct environmental inspections at California POE. Ensure compliance and enforcement at the ports of entry in the California/Baja California border. 	<ul style="list-style-type: none"> Inspections at POE on-going. On June 20, 2018- DTSC and San Diego County, SPA and PROFEPA, hosted about 200 industry participants at import/export training workshop in Tijuana. 	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 2017-2018 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 2017-2018 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 2017-2018 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	Results	Progress
<i>Air quality and asthma actions</i>						
Environmental Health and Asthma Awareness in Low-Income Housing Communities of Imperial County	EPA (Border, Air and Children's Health), El Centro Regional Medical Center (ECRMC)	EPA/NADB: \$115,000 Additional \$17,000 EPA Funds	Jessica Helgesen (EPA) Helgesen.jessica@epa.gov Priyanka Pathak (EPA) Pathak.priyanka@epa.gov Mariela Lopez (EPA) Lopez.mariela@epa.gov	<ul style="list-style-type: none"> 80 asthmatic children of families in low-income housing in Imperial County enroll in the program for IVCAP's 1-1 in-home asthma interventions. Conduct at least 10 <i>Environmental Health & Asthma Awareness</i> forums in low-income housing communities. Additional Grant: Extended EPA funding will help educate ~70 families on asthma management during in-home visits. 	<ul style="list-style-type: none"> 100 asthmatic children in Imperial County, identified through Healthy Homes forums attended by over 220 individuals, participated in IVCAP's in-home asthma program. Completed 10 forums. Trained over 50 low-income housing maintenance workers in El Centro, Calexico, and Brawley on how to recognize and address sources of asthma triggers. Reduction of emergency room visits and hospitalizations. 	Deliverable Achieved
Develop an Asthma Strategy for Imperial Valley, CA	EPA and multiple asthma stakeholders working in Imperial Valley	EPA through Environmental Finance Center Grant: Approximately \$60,000	Priyanka Pathak (EPA) Pathak.priyanka@epa.gov Emily Pimentel (EPA) pimentel@epa.gov	<ul style="list-style-type: none"> EPA tasked the Environmental Finance Center West (EFC) to research and draft a financing strategy for in-home asthma service providers in Imperial County. 	<ul style="list-style-type: none"> Outreach and circulation occurred in January 2017 of the EFC West's report completed in December 2016 entitled "Roadmap for Financing In-Home Asthma Care in Imperial County, CA", available here: http://www.efcwest.net/news/2017/1/10/now-available-roadmap-for-financing-in-home-asthma-care-in-imperial-county 	Deliverable Achieved



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Results	Progress
Support "Roadmap for Financing In-Home Asthma Care in Imperial County"	EPA and multiple asthma stakeholders working in Imperial Valley	EPA: ~\$9,000	Priyanka Pathak (EPA) Pathak.priyanka@epa.gov	<ul style="list-style-type: none"> Fund neutral facilitator to organize two stakeholder meetings on collaboration and coalition-building, which is a component of the "Roadmap for Financing In-Home Asthma Care in Imperial County, CA". 	<ul style="list-style-type: none"> Facilitators from the Center for Collaborative Policy (CCP) organized an asthma stakeholder meeting in El Centro, CA on August 30, 2017. CCP shared a meeting summary and information on drafting a charter document for future coalition-building activities. 	Deliverable Achieved
Implement CDPH's California Breathing Asthma Program [Asthma Management Academy (AsMA)]	CDPH-EHIB-CPEES, Comité Cívico del Valle (Brawley, CA) Esperanza, Community Housing Cooperation (Los Angeles, CA)	CDPH: \$190,000	Lori Copan, Ashley Kissinger, and Jackie Wong (CDPH-EHIB-CPEES)	<ul style="list-style-type: none"> Implement AsMA series that prepares community health workers to provide national asthma guidelines-based self-management education to families living with uncontrolled asthma. Participants attend five 2.5 hours module courses e.g., 1) The Scope of Asthma, 2) Asthma Trigger Identification, 3) Asthma Medications, 4) Monitoring and Assessing Asthma, and 5) Medication Delivery Devices Control. 	<ul style="list-style-type: none"> Recruited and trained 48 people in four series of trainings from seven different organizations in the top quartile in CA for asthma emergency department (ED) visits, including Federally Qualified Health Centers (FQHCs), clinics, community-based organizations, and health departments in San Diego and Imperial Counties. In total 275 community health workers have been trained in ten Southern and central California counties. Evaluation results of AsMA training participant competency tests to conduct asthma self-management education had 90% pass rate. 	Deliverable Achieved



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Results	Progress
<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, EPA	N/A: Staff time	Fabiola Estrada (EPA) Estrada.Fabiola@epa.gov Jessica Helgesen (EPA) 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"> In 2017, shared Pesticide Prevention Exposure information and ways to report exposures to ~500 of ~ 3,000 field workers and their families in Calexico, CA. In 2018 at the 39th Annual Farmworker Appreciation Breakfast shared information on Worker Protection Standard and general pesticide safety. Participants also received new pairs of socks from the EDD. EPA Region 9 contributed more than 300 pairs of socks to the EDD through a collection event earlier this year. Due to heavy rain, only about 300 of the expected 3,000 workers attended. 	Deliverable Achieved
Presentation on Pesticide Safety for community leaders/promotores	EPA, Comité Cívico del Valle, California Department of Pesticide Regulation, Imperial CAC	Staff time	Fabiola Estrada (EPA) Estrada.fabiola@epa.gov	<ul style="list-style-type: none"> Educate promotores on pesticide safety, the revised Worker Protection Standard (WPS) and Integrated Pest Management (IPM). 	<ul style="list-style-type: none"> Presented to seven participants in Brawley, CA on August 22, 2017. 	Deliverable Achieved
Pesticide Safety and Integrated Pest Management Train the Trainer workshop for community leaders/promotores	USEPA, Comité Cívico del Valle, California Department of Imperial County Ag Commissioner's Office	Staff time	Fabiola Estrada (EPA) Estrada.Fabiola@epa.gov Jessica Helgesen (EPA) Helgesen.Jessica@epa.gov	<ul style="list-style-type: none"> Educate promotores on pesticide safety, the revised Worker Protection Standard (WPS), the new California rule on pesticide use around schools, and Integrated Pest Management (IPM). 	<ul style="list-style-type: none"> On November 30, 2017 presented to 10 promotores, who are in the Asthma Education Program, on various pesticide laws and regulations, integrated pest management and general pesticide safety in Brawley, CA. 	Deliverable Achieved



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Fundamental Strategy – Environmental Health						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Output	Results	Progress
<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	EPA, CCV, DTSC, EJ Task Force, CARB, IID, IC APCD, CA Water Boards	Staff time	Priyanka Pathak (EPA) Pathak.priynka@epa.gov Jessica Helgesen (EPA) Helgesen.jessica@epa.gov	<ul style="list-style-type: none"> Participation and helping with issues/connection as needed. 	<ul style="list-style-type: none"> State Drinking Water Program has been participating in EJ Task Force meetings to provide information and answer questions about their efforts to increase sampling of irrigation canal water used in residential areas. 	Moderate Progress
Expand knowledge on Border 2020 and increase Environmental Health Awareness along US/MX Border	EPA (Border, Children's Environmental Health, ATRIA)	Staff time	Jessica Helgesen (EPA) Helgesen.jessica@epa.gov Mariela Lopez (EPA) Lopez.mariela@epa.gov	<ul style="list-style-type: none"> Present on Environmental Health Topics and share key information on the Border 2020 Program. 	<ul style="list-style-type: none"> Presented information (Spanish/English) to over 80 stakeholders on various environmental health topics at the Stop and Listen Asthma Expo and Adelante Promotores Conference. 	Moderate Progress
Healthy Homes and Indoor Air Quality Presentation hosted by La Posta Tribe	La Posta Tribe, Manzanita Tribe, Southern Indian Health Council	Staff time and outreach material	Priyanka Pathak (EPA) Pathak.priynka@epa.gov Jessica Helgesen (EPA) Helgesen.jessica@epa.gov	<ul style="list-style-type: none"> Provide outreach on healthy homes principles and practices to encourage programs to make partnerships and work holistically on public health issues related to housing. 	<ul style="list-style-type: none"> Provided training and outreach materials to 10 tribal members. 	Deliverable Achieved