## CALIFORNIA/BAJA CALIFORNIA BORDER 2020 MASTER ACTION PLAN - Final Closeout Report 2013-2014 Goal 1- Reduce Air Pollution

Description of Action	Collaborating Organizations	Cost	Sources of Funding	Lead Points of Contact	2014 Target Output and Results	Status
Objective 1: By 2020, in accorda vehicle emissions standards, and	nce with the NAFTA, promote reduce vehicle emissions at poi	the reduction of th	e number of vehicle	s operating in the border regioner feasible reduction measure	on that do not comply with respective S.	
Implement State Vehicle inspection program in Baja California	Secretaría de Protección al Ambiente (SPA)	Staff time	SPA	Saul Guzman- SPA (saul.guzman@semarnat.gob.mx)	Metrics: Annual Numbers of vehicles inspected. Results: Information not available at this time.	Ongoing. This action will be included in the 2015-2016 Action Plan.
Implement sustainable urban transport systems in Tijuana, Mexicali	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), Secretaría de Infraestructura y Desarollo Urbano del Estado de Baja (SIDUE), SPA	NA				Cancelled.
Vehicle Idling Emissions Study at Calexico East and West Ports of Entry	Imperial County Air Pollution Control District, BECC, EPA	\$99,000	EPA,BECC	Belen Leon- ICAPCD (belenleon@co.imperial.ca.us)	Metrics: Initiate field work. Results: Field work is underway and expect completion later in 2015.	Ongoing. This action will be included in the 2015-2016 Action Plan.
Objective 2: By 2020, reduce poll Diego/Tijuana, Imperial County/	utant emissions in order to app Mexicali, Ambos Nogales, Paso EPA, San Diego County Air	oroach attainment of del Norte (El Paso Staff Time	of respective nations o/Juarez/Sunland Pa	<u>irk)</u>	s in the following airsheds: San	
ttainment	Pollution Control District (SDAPCD)	Start Time	EFA, SDAPCD	John Ungvarsky- EPA (ungvarsky.john@epa.gov)	Metrics: San Diego redesignation to attainment for ozone. Results: Activity is completed. EPA approved redesignation of San Diego County as an attainment area for the 1997 Ozone NAAQS, effective 07/05/13 (78 FR 33230).	Completed.
fedia Outreach Campaign in Mexicali reduce open burning and fireworks uring holiday season	Imperial County Air Pollution Control District (ICAPCD), Air Quality Task Force, and SPA	\$50,000	Border 2012/ ICAPCD	Belen Leon- ICAPCD (belenleon@co.imperial.ca.us)	Metrics: Conduct media outreach campaign to reduce open burning and fireworks during holiday season in Mexicali. Results: Launched 4 media campaigns in Mexicali to reduce open burning and fireworks to reduce PM2.5 emissions in the binational basin.	Completed.

Municipal Paving Project-Mexicali, Baja California.	Consejo de Urbanización Municipal de Mexicali	\$45,200,000	Local Financing and NADB Loan	Juan Antonio Flores, NADB	Metrics: This project will pave 1.1 million square meters of roadway, reducing particulate matter emissions. Results: Construction completed in June 2014 (522,643 m2 paved).	Completed
Adopt Fugitive Dust Control Rules to Reduce PM10 emissions in Imperial County	ICAPCD, California Air Resources Board (CARB)	Staff Time	ICACPD	Brad Poiriez-ICAPCD (bradpoiriez@co.imperial.ca.us)	Metrics: Adopt Fugitive Dust Control Rules to Reduce PM10 emissions in Imperial County.  Results: Fugutive Dust Regulations were approved by EPA on March 28, 2013. More information can be found at:  http://www.epa.gov/region9/air/imperial/index.html #032813	Completed.
Implement Pro Aire Mexicali strategies	City of Mexicali, Procuraduria Federal de Protección al Ambiente (PROPEPA), Secretaría de Communicacion y Transporte (SCT), SPA, SEMARNAT	Staff time	City of Mexicali, SEMARNAT, PROPEPA, SPA, SCT	City of Mexicali, SPA Saul Guzman- SEMARNAT (saul.guzman@semarnat.gob.mx) Jesus Jiménez Payan - PROFEPA (jjimenez@profepa.gob.mx) SCT	Metrics: Strengthening and improving inspections and surveillance practices at federal and state industries, business and services to reduce air emissions.  - Promote fuel efficiency measures in passengers and freight transportation.  - Implement and oversee the vehicle smog check program.  Results: Strategies implemented. Smog Check program initiated in 2013. Paving completed in 2014.	Completed.
Implement ProAire Tijuana Metropolitan area strategies	City of Tijuana, SPA, SEMARNAT, PROFEPA, SCT	Staff time	City of of Tijuana, SEMARNAT, PROPEPA, SPA, SCT	City of Tijuana SPA Saul Guzman-SEMARNAT (saul guzman@semarnat.gob.mx) Jesus Jiménez Payan - PROFEPA (jjimenez@profepa.gob.mx) SCT	Metrics: Promote the integral mobility of public transportation in the metropolitan area  - Promote the self regulatory mechanism, the constant improvement and the eco-efficiency for industry, business and services, to reduce air emissions  - Implement and supervise the vehicle smog check program  - Develop an epidemiologic surveillance system related to air quality. Results: Project postponed. SEMARNAT plans to develop Pro-Aires for State of Baja California.	Ongoing. This action will be included in the 2015-2016 Action Plan.

Carl Moyer Program—reduce emissions from mobile sources	SDAPCD/ CARB	\$1,400,000		Mike Watt-SDAPCD (Michael, Watt@sdcounty.ca.gov)	Metrics: The number of projects funded in California Border Region that reduced PM and NOx from voluntary emission reductions from heavy-duty diesel engines. Results: Carl Moyer Program is in its 16th year of providing funding to encourage voluntary emission reductions from heavy-duty diesel engines. SDAPCD funded more than 80 projects in the California Border Region in FY14.	
Airshed, and any additional bina	tional airshed that is designed	orks and provide real-ti ed as non-attainment for	me access to air quarter of the second	<u>iality data: California/Baja Ca</u> iir quality Standards prior to 2	lifornia, Arizona/Sonora, Paso del Norte 2015.	
Operate and Maintain the Imperial County Air Quality Monitoring Network.	ICAPCD, CARB	Staff time and maintenance costs	ICAPCD	Brad Poiriez- ICAPCD  bradpoiriez@co.imperial.ca.us  Monica Soucier- ICAPCD  monicasoucier@co.imperial.ca.us	Metrics: Ongoing - Operation & Maintenance (O&M) as well as collection of accurate data.  Results: Activity is ongoing. Both networks are working properly. Imperial County real time air quality information can be found at: <a href="http://imperialvallevair.org">http://imperialvallevair.org</a> San Diego County real time air quality information can be found at: <a href="http://www.sdaped.org/nir/maps/current_aqi.html">http://www.sdaped.org/nir/maps/current_aqi.html</a>	Ongoing. This action will be included in the 2015-2016 Action Plan.
Implement Monitoring Action Plan to help maintain the air quality monitoring network in northern Baja California.	EPA, SPA, SEMARNAT, CARB, Instituto Nacional de Ecología (INE)	EPA - \$250, 000 in 2010 for PM analysis and CARB support, additional in kind technical assistance, SPA - cost for network operations; INE - in kind for technical assistance and Meteorological audits; ARB - in kind for technical assistance	SEMARNAT, INE	(saul.guzman@semarnat.gob.mx)		Ongoing. This action will be included in the 2015-2016 Action Plan.
Operate and maintain the San Diego air monitoring network.	SDAPCD, CARB	Staff time and costs to upkeep monitor network		County  Mahmood Hossain@sdcounty.ca		Ongoing. This action will be included in the 2015-2016 Action Plan.

Completion of Baja California Climate	SPA, SEMARNAT-INE.	\$102,000	BECC, EPA,	Saul Guzman- SPA	Metrics: Complete Phase I of the State of Baja,	Completed.
(Phase I) Action Plan	CONAYCT, UABC, COLEF, CICESE		SEMARNAT	(saul,guzman@semarnat.gob,mx)	California's Climate Action Plan. Results: Completed in December 2012.	Completed
Baja California Climate Change Action Plan-Mitigation Cost Benefit Analysis (Phase II)	SPA, BECC, INE	\$275,000	BECC	T. Balarezo-BECC (tbalarezo@ cocef.org)	Metrics: Complete Phase II Final Report. Results: Project to be completed in fiscal year (FY) 2015.	Ongoing. This action will be included in the 2015-2016 Action Plan.
Objective 5: By 2020, reduce emis	sions and associated impacts t	through energy effic	iency and/or alter	native/renewable energy project	ts.	
Small Scale Hydroelectric Plant at the Carrizo Dam in Tecate B.C. Production of 20 MW of electricity by a small hydroelectric plant using the flow from the Rio Colorado- Tijuana aqueduct before it is deposited into the El Carrizo Dam.	BECC, Baja California, Comisión Federal de Electricidad (CFE), North American Development Bank (NADB)	\$50,000,000	NADB	Renata Manning- BECC (rmanning@cocef.org)	Metrics: Certification/ Construction of small scale 20MW hydroelectric plant in Tecate. Results: Project is under development.	Ongoing. This action will be included in the 2015-2016 Action Plan.
	BECC, El Centro Authority, NADB	Pending	NADB	Renata Manning- BECC (rmanning@cocef.org)	Metrics: Certification/Construction of 20MW photovoltaic power generating facility to serve El Centro, California. Results: Project is complete.	Completed.
solar power generation plant located on	BECC, San Diego State University (SDSU), NADB	19,200,000	NADB	Renata Manning- BECC (rmanning@cocef.org)	Metrics: Certification/Construction of a 5 MW photovoltaic power generation plant located at the SDSU campus in Brawley, California. Results: Project is complete.	Completed.

	Ocotillo Express Wind Project. The 265 MW Ocotillo Express Wind Project ("Ocotillo" or the "Project") is located primarily on Bureau of Land Management land approximately 30 miles west of the town of El Centro, in western Imperial County, CA.		\$110,000,000	NADB	Renata Manning-BECC (rmanning@cocef.org)	Metrics: Certification/Construction of 265 MW wind project in Ocotillo, California. Results: The project consists of 112 Siemens SWT turbines. Project output is sold under a 20-year PPA to San Diego Gas & Electric Company ("SDGE"). The Project was fully permitted and certification took place in October, 2012.	Completed.
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	CALIFOR	NIA/BAJA CALI		RDER 2020 MASTE aprove Access to Clea	R ACTION PLAN - Final Closeout in and Safe Water	Report 2013-2014
Description of Project	Collaborating Organizations	Cost	Sources of Funding	Points of Contact	2014 Target Outputs and Results	Status
Objective 1: Promote the increa	se in the number of homes co	onnected to safe drinkin	ng water and adec	quate wastewater treatment.		
Sub-objective 1a: By 2015, prom						
Sub-objective 1b: By 2015, prom	ote access to adequate wastew	vater sanitation to 42,000	households. Revis	e targets every two years.		
Objective 2: Help drinking water	and wastewater utilities in	the border region to im	plement sustainal	ole infrastructure practices t	o reduce operating costs, improve energy efficien	ncy, use water efficiently ar
						ncy, use water efficiently ar
Sub-objective 2a: Incorporate sust	ainable infrastructure element	s, as feasible and approp	riate, into U.SMe	exico Border Water Infrastruct	ure Program-supported in BECC-certified projects.	
Sub-objective 2a: Incorporate sustemants  EPA Region 9 will incorporate sustainable infrastructure components	ainable infrastructure element EPA, Comisión Nacional del Agua (CONAGUA), Border		riate, into U.SMe			
Sub-objective 2a: Incorporate sust EPA Region 9 will incorporate sustainable infrastructure components in the development phase of US-	EPA, Comisión Nacional del Agua (CONAGUA), Border Environment Cooperation	ss, as feasible and approp	riate, into U.SMe	exico Border Water Infrastruct	ure Program-supported in BECC-certified projects.  Metrics: Sustainable infrastructure components will be incorporated into two projects based on the results from water/energy audits. Results: Final	I Ongoing. This activity will be
Sub-objective 2a: Incorporate sust EPA Region 9 will incorporate sustainable infrastructure components in the development phase of US- Mexico border water infrastructure	ainable infrastructure element EPA, Comisión Nacional del Agua (CONAGUA), Border	ss, as feasible and approp	riate, into U.SMe	exico Border Water Infrastruct	ure Program-supported in BECC-certified projects.  Metrics: Sustainable infrastructure components will be incorporated into two projects based on the	Ongoing. This activity will be included in the 2015-2016
EPA Region 9 will incorporate sustainable infrastructure components in the development phase of US-Mexico border water infrastructure program projects.	EPA, Comisión Nacional del Agua (CONAGUA), Border Environment Cooperation Commission (BECC)	Not available at time of print	Local, state and federal partners	Hector Aguirre- US EPA (aguirre.hector@epa.gov)	ure Program-supported in BECC-certified projects.  Metrics: Sustainable infrastructure components will be incorporated into two projects based on the results from water/energy audits. Results: Final designs for three projects are incorporating audit	Ongoing. This activity will be included in the 2015-2016
Sub-objective 2a: Incorporate sust EPA Region 9 will incorporate sustainable infrastructure components in the development phase of US- Mexico border water infrastructure program projects.	EPA, Comisión Nacional del Agua (CONAGUA), Border Environment Cooperation Commission (BECC)	Not available at time of print	Local, state and federal partners	Hector Aguirre- US EPA (aguirre.hector@epa.gov)	ure Program-supported in BECC-certified projects.  Metrics: Sustainable infrastructure components will be incorporated into two projects based on the results from water/energy audits. Results: Final designs for three projects are incorporating audit	Ongoing. This activity will be included in the 2015-2016
Sub-objective 2a: Incorporate sust	EPA, Comisión Nacional del Agua (CONAGUA), Border Environment Cooperation Commission (BECC)	Not available at time of print	Local, state and federal partners	Hector Aguirre- US EPA (aguirre.hector@epa.gov)	ure Program-supported in BECC-certified projects.  Metrics: Sustainable infrastructure components will be incorporated into two projects based on the results from water/energy audits. Results: Final designs for three projects are incorporating audit	Ongoing. This activity will be included in the 2015-2016

Conduct feasibility analysis of anaerobic sludge digesters at International Treatment Plant in San Ysidro, CA.	EPA, BECC, International Boundary and Water Commission (IBWC)	\$126,000	ЕРА	Jessica Hernandez- BECC (jahernandez@cocef.org)	Metrics: Develop feasibility analysis report describing capital costs, O&M costs, and methane reuse options. Results: Feasibility study completed and submitted to IBWC for consideration.	Completed.
Sub-objective 2c: Build operationa	al, managerial, and financial cap	acity at border drinl	king water and waste	water utilities through training.		
Wastewater operations training in seven (7) Mexican border communities including Matamoros, and Reynosa, Tamaulipas, Ciudad Juarez, Chihuahua, Sonoyta and San Luis Rio Colorado, Sonora, Tecate and Playas de Rosarito, Baja California.		\$40,000	BECC, EPA Bord 2012 funds	er Salvador Gandara- EPA, Region (Gandara salvador@epa.gov)	Metrics: Wastewater operations training in seven Mexican border communities. Results: Trained 50 people. Implementation of 288 hours of training over 18 courses.	Completed.
Objective 3: Work binationally to	identify and reduce surface w	vater contaminatio	n in specific high pr	iority water bodies or watershe	ds.	
Sub-objective 3c: Every two years  Wastewater collection system	identify and implement at least identify and implement at least of EPA, CONAGUA, BECC,	one project to redu	ce the level of heavy	metals, sediment, and/or bacteria	entering the Santa Cruz River and/or the Nogales BOD), trash, and/or phosphates entering the New Metrics: BECC certification of project to	
rehabilitation in colonias Loma Linda and Esperanza in Mexicali, BC to repair 10,000 meters of sewer lines.	NADB, Comisión Estatal de Servicios Públicos de Mexicali (CESPM)		(PDAP)	(jahernandez@cocef.org)	rehabilitate wastewater collection system in colonias Loma Linda and Esperanza in Mexicali, BC. Results: Certified in December 2014.	
Develop and establish a new and comprehensive program to control agricultural discharges and drain O&M discharges in the Imperial Valley.	California Regional Water Quality Control Board - Region 7	\$170,000	CRWQCB	Jose Angel-CA RWQCB (jangel@waterboards.ca.gov)		Ongoing. This activity will be included in the 2015-2016 Action Plan.
Draft and adopt a new permit that requires all CAFOs that are within the floodplain of the New River in the Imperial Valley to contain their waste.	California Regional Water Quality Control Board - Region 7	\$90,000	CRWQCB		Metrics: A new General Non-NPDES permit for CAFOs in the floodplain by 2014. Results: CRWQCB issued enforcement to 15 CAFOs in the Imperial Valley that were in noncompliance with the NPDES permit and required that CAFOs in the floodplain demonstrate that their facilities are protected against 100-yr washout.	Completed.

Improve water quality monitoring of the New River in Calexico, CA.	California Regional Water Quality Control Board - Region 7	\$24,000	CRWQCB	Jose Angel-CA RWQCB (jangel@waterboards.ca.gov)	Metrics: Annual report of New River water quality along the border and the Imperial Valley. Results: CRWQCB resumed monitoring of the New River in Calexico in August 2014. Monitoring takes place monthly for baseline water quality (ph, DO, temperature, EC), bacteria, TSS, BOD, and nutrients.	
Increase the number of sites, frequency, and review of water quality monitoring of the New River in Mexicali, B.C.	CONAGUA, CILA	Nationwide contract, no specific information for the river is available.	CONAGUA	Antonio Espinoza - CONAGUA antonio espinoza@conagua.gob.m x	Metrics: Periodic water quality information. Results: Information not available at this time.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
	CONAGUA	Not available at time of print	CONAGUA	Angel Lozano, CONAGUA (Angel.lozano@conagua.gob.mx)	Metrics: Compliance with discharge regulations.  Results: CONAGUA continues monitoring the compliance of industrial discharges.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Sub-objective 3d: Every two years i	dentify and implement at le	ast one project to reduce	the level of bacter	ia, sediment, and/or trash that er	l nters the Tijuana River.	
Remove and properly dispose of sediment from Smuggler's Gulch and Main channel of the Tijuana River in the U.S.	City of San Diego	\$2.2M	City of San Diego	David Wells, City of San Diego (dwells@sandiego.gov)	Metrics: 40,000 cubic yards of sediment will be removed by end of 2014. Results: 55,000 cubic yards of sediment were removed in Winter 2013 - 2014.	Completed.
Conduct modeling effort to determine sediment loads from Tijuana, BC into San Diego, CA and estimate reductions through various Best Management Practices, and land-use options.	EPA, US Department of Agriculture (USDA), SDSU	\$100,000	EPA Regional Applied Research Efforts funds and Border 2020 funds	(liden.douglas@epa.gov)	Metrics: Sediment model developed for Tijuana Watershed using the Automated Geospatial Watershed Assessment (AGWA) tool. Results: Model still in development. Will conclude by 2017 but preliminary results should be available in 2015.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Conduct volunteer trash cleanup events.	EPA, Wildcoast (NGO)	\$54,000	EPA Border 2012 funds	(Liden.douglas@epa.gov)	Metrics: Implement clean up events.  Results: 450 students educated on environmental issues and threats presented by improper solid waste management.  - 30 environmental club members trained on solid waste management and proper plastic recycling.  - 2450 cubic feet of PET plastics collected and removed from Los Laureles Canyon.  - 3 school-based plastics recycling programs implemented.  Targets were met and grant closed.	Completed.
Remove and properly dispose of sediment from main channel of Tijuana River in the U.S.	IBWC	\$1,000,000	IBWC	(Steve smullen@ibwc.gov)	Metrics: Up to 60,000 cubic yards of sediment will be removed by the end of 2013.  Results: 60,000 cubic yards removed in 2013.	Completed.

Rehabilitation, cleaning and removal of sediment from main channel of Tijuana River in Mexico.	Comisión Estatal del Agua (CEA), CONAGUA, CESPT	Not available at time of print	CONAGUA	Jose Gutierrez-CONAGUA (jose.gutierrezr@conagua.gob.mx)	Metrics: Up to 80,000 cubic meters of sediment removed by the end of 2014. Results: In 2013, 340,000 m3 of sediments were removed from main channel of the Tijuana River, in 2014 180,000 m3 were removed.	Completed.
Demarcation of floodplain in Tijuana, to help discourage illegal development.	CONAGUA, Secretaría de Infraestructura y Desarollo Urbano del Estado de Baja (SIDUE), City of Tijuana	Not available at time of print	CONAGUA	Jose Gutierrez-CONAGUA (jose.gutierrezr@conagua.gob.mx)	Metrics: Demarcate with signage at least 10 river kilometers under threat of irregular development.  Results: CONAGUA is still working on the demarcation of the floodplain of the Tijuana River.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Establish conservation easements, using the Los Sauces Canyon as a model.	SPA, CONAGUA, Instituto Metropolitano de Planeación de Tijuana (IMPLAN), and SEDESOL	Not available at time of print	Instituto Metropolitano de Planeación de Tijuana (IMPLAN),	Daniel Rubio Diaz de la Vega (IMPLAN)	Metrics: Up to 20 acres of conservation easements adopted. Results: Los Sauces adopted as a conservation area in 2011 (approximately 10 acres), but mixed land-ownership has prevented other areas from being protected. IMPLAN is now focused on area in Cerro Colorado.	
Bi-national treaty (aka, "Minute") committing the U.S Mexico to address issues of sediment, trash, and bacteria in the Tijuana Watershed by identifying issues, providing solutions, acquiring resources, and informing the public.	IBWC, CILA	Staff time	IBWC	John Merino- IBWC (john.merino@ibwc.gov)	Metrics: Develop a treaty minute following engineer's report. Results: Treaty minute drafted and awaiting signature.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Revegetate areas and remove trash impacting Tijuana River Watershed (in San Diego, CA), and train volunteers.	EPA, BECC, Southwest Wetlands Interpretive Association (SWIA)	\$200,000	EPA Hometown Grant and remaining West Coast Estuaries Initiative funds		Metrics: Implement activities that positively impact Tijuana River Watershed. Results: 3000 native plants propagated, 200 plants sown, 3 volunteer cleanup events, 20 hours of training modules, 450 volunteer hours on both sides of the border. Targets met. Final report pending.	Completed.
Incorporate homes in marginalized colonias that do not have wastewater treatment into the City of Tijuana's service area. This is the first step to allow for the utility to provide treatment, which reduces surface water contamination.	CESPT, SPA	Not available at time of print	CESPT, CONAGUA	Saul Guzman- SEMARNAT	Metrics: Implement steps to allow for the utility to provide treatment in marginalized areas (colonias) in the City of Tijuana, Results: 3,000 households connected to wastewater treatment.	Completed.
	CESPT, CONAGUA, NADB/BECC		NADB, CONAGUA	(jahernandez@cocef.org)	Metrics: Certification/Construction of project to rehabilitate and replace pipelines and manholes in Tijuana. Results: Project certified in December of 2014.	Completed.

Modify monitoring Program through the National Pollutant Discharge Elimination System (NPDES) Permits, Investigative Orders, and multiple agency collaboration on the condition of the Tijuana River, Estuary, and near shore waters.		Staff time	San Diego-Regional Water Quality Control Board (SD- RWQCB)	(mvaldovinos@waterboards.ca.go	Metrics: Utilize data from monitoring under NPDES permit and input from stakeholders, including IBWC, City of San Diego, the Tijuana River Valley Recovery Team, to develop a monitoring report on the condition of the Tijuana River, Tijuana River Estuary, and near shore waters. Results: Monitoring requirements in NPDES permit for International Treatment Plant established for nearshore waters.	Completed.
Action Plan for the Tijuana River Valley Recovery Strategy	SD-RWQCB, City of San Diego, County of San Diego State Parks, US Fish and Wildlife Service (US FWS), IBWC, City of Tijuana.	\$100,000	State Water Resources Control Board- Clean Up and Abatement Account, Prop 84 IRWM Grant Program (potential).	Melissa Valdovinos, SD-RWQCB (mvaldovinos@waterboards.ca.go v)	Metrics: Final Action Plan for Tijuana River Valley Recovery Team adopted, which will identify programs, projects, and studies to reduce trash and sediment in Tijuana River Valley. Results: Five (5) year action plan under development.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Tijuana River Valley	SD-RWQCB, City of San Diego, County of San Diego State Parks, US FWS, IBWC, City of Tijuana.	\$300,000	State Water Resources Control Board- Clean Up and Abatement Account, Prop 84 IRWM Grant Program (potential).	(mvaldovinos@waterboards,ca.go v)	Metrics: Sediment Management Plan for the Tijuana River Valley, which identifies sediment disposal options and cost for the City and County of San Diego, State Parks, IBWC, and the US Fish and Wildlife Service. Results: Sediment management plan is included as one item to be developed under 5-Year Action Plan.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Removal of sediment from Goat Canyon Sediment basins.	CA State Parks, Cal Recycles	\$700,000	Cal Recycle	(cperegrin@parks.ca.gov)	Metrics: Removal of 60,000 cubic yards of sediment from basin by 2014.  Results: Fall 2012: excavation of 45,000 cy of sediment and trash of which 30,000 cy were screened to remove trash. Sediment retained on-site until additional funds become available. Trash hauled to the landfill. Total cost \$800,000 with contributions from CalRecycle, CA State parks, City of San Diego, and EPA.  Fall 2013: excavation of 15,000 cubic yards of sediment and trash all of which was screened to remove trash. Most of the sediment was hauled to a local construction site. Trash was left consolidated on the processing pad. Total cost was \$310,000 from CA State Parks.	Completed.

Analysis of micro-plastics in sediment from Goat Canyon sediment basins.	EPA, Tijuana National Estuarine Research Reserve	\$200,000	EPA	Harry Allen- US EPA (allen.harry@epa.gov)	Metrics: Analysis of microplastics in sediment to determine relative volume, and to compare relative levels of PCBs, pesticides, and metals on plastic particles vs. the sediment. Results: Analysis completed. Report available upon request.	Completed.
Construction of the second phase of the Tecate River Wetlands.	Comisión Nacional de Áreas Naturales Protegidas (CONANP), Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)	\$332,000	Comisión Nacional de Áreas Naturales Protegidas (CONANP)		Metrics: Construct second phase of Tecate River Wetlands. Results: Results were not available at the time of printing this report.	Ongoing. This activity will be included in the 2015-2016 Action Plan.
Objective 3-other: Initiatives to a Objective 4: Provide the public wir Sub-objective 4a: Develop a bina	th timely access to water quality	data in binational	water bodies and water			through 2020
Objective 4: Provide the public with Sub-objective 4a: Develop a binar	th timely access to water quality tional website that displays timel	data in binational y information on bo	water bodies and wate	sides of the border in the Brown	ble, web-based format.  nsville/Matamoros area, and ensure its operation  Diego/Tijuana area, and ensure operation of websi  Metrics: Certification for Tijuana and Rosarito	

Playas Limpias Committee

Tijuana lifeguards with grant to WildCoast. Protocol not yet adopted.

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.

Doug Liden, US EPA

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EPA Border 2020

Develop protocol in Tijuana for beach

advisories with Playas committee and

beach closure notification system.

EPA, BECC, CONAGUA,

de Marina, City of Tijuana,

Secretaria de Salud, Secretaria

\$12,000

practices and public safety activities, and 6) environmental education activities, beach signage and public notification of poor water quality.

Results: Tijuana municipality has not yet completed actions needed for Clean Beach

Metrics: Develop protocol in Tijuana for beach

advisories with Playas committee and beach closure

notification system. Results: Signs purchased for

Ongoing. This activity will be

included in the 2015-2016

Action Plan.

Binational Tijuana River Watershed Portal.	SD-RWQCB	Part of a \$252,000 contract	SD-RWQCB (via RFP)	(mvaldovinos@waterboards.ca.go v)	ArcGIS maps of proposed and existing trash and sediment source control projects in the Tijuana River Valley flood control zone to be maintained and distributed to all relevant stakeholders and Tijuana River Valley Recovery Team member agencies via an Internet-based watershed portal system; to result in a tangible geographic representation of binational efforts to implement the	Completed.
Binational water quality database with GIS portal.	IBWC	Not available at time of print	Not available at time of print	Gilbert.anaya@ibwc.gov	"Recovery Strategy" Results: Watershed Information Integration Portal (WIIP) is operational and ready for use. Contact: Ilya Zaslavsky, UCSD San Diego Supercomputer Center, 858-534-8342 for implementation details.  Metrics: Operate and update Website.  Results: Website is operational and link is	Ongoing. This activity will be included in the 2015-2016 Action Plan.

## CALIFORNIA-BAJA CALIFORNIA BORDER 2020 MASTER ACTION PLAN – Final Closeout Report 2013-2014 Goal 3- Promote Materials Management, Waste Management and Clean Sites

Description of Action	Collaborating Organizations	Cost	Sources of Funding	Lead Points of Contact	2014 Target Outputs and Results	Status

Objective 1: By 2020, increase local and state-level institutional knowledge and experience in the area of sustainable

Increase public and private sector knowledge about green waste and food scraps composting practices in Tijuana being used to divert organics from landfills. This activity builds on the compost center opened under the Border 2012 Program.		\$20K follow-up grant (first grant investment \$90K)	EPA/BECC and in- kind support from Municipality of Tijuana	Carmen Romo, Tijuana Calidad de Vida romo@calidad-de-vida.org	Metrics: Open and operate compost center and use it to develop capacity and education on green waste compost practices. Complete at least two trainings (webinar based or other outreach-training format). Measure number of individuals and business/institutions that participate in the training.  Results: First municipal border compost center operated by Tijuana Calidad de Vida.  - Composted 150 tons of landscape cuttings.  - Planted 300 shrubs and 140 trees.  - Trained 800 citizens, including compost professionals and created manual for municipal operations.  - Held two professional forums and a webinar based training event (posted on Border 2020 website). Webinar link:  http://www2.epa.gov/border2020/seminario-sobre-practicas-y-mereados-de-compostaje	
	Fundación Rancho La Puerta, Municipality of Tecate, and Comité Mujeres Lluvia del Sol.		EPA/BECC and in- kind support from community thru volunteer cleanups and educational outreach.	Guillermo Romero Ibarrola, Fundación la Puerta, griromero@yahoo.com Jose Garcia Castellar, and Sergio Javier Martinez Olguín	Metrics: Implement at least three trash cleanups from river, establish plastic and paper recycling cooperative, and educate children in local elementary schools on zero-waste practices.  Results: Trash cleanups in Tecate led by NGO Fundación Rancho la Puerta along the Tijuana River Watershed tributary, removed 30,994 kgs of plastic and debris through 6 cleanup events. Cleanup events recruited an average of 200 people per event. Active community-engagement on zero-waste practices resulted in new plastic and cardboard recycling centers.	Completed.
Increase public knowledge about trash impacts to regional-land and watersheds; promote zero waste practices, including recycling plastic bottles (in partnership with Goal 2, Improve Water Quality).	de Vida		EPA/BECC and in- kind support from community thru volunteer cleanups and educational outreach.	Paloma Aguirre, Wildcoast, paloma.aguirre@wildcoast.net	Metrics: Collect plastic bottles and educate elementary school children and educators.  Results: Public school campaign collected 507 lbs. of plastic; educational outreach to 780 children.  Wildcoast leveraged this project by holding trash cleanup campaigns in association with other NGOs in Tijuana.	Completed.

Increase public knowledge about trash impacts to regional land and watersheds; promote zero waste practices, including recycling plastic bottles (in partnership with Goal 2, Improve Water Quality).	4-Walls in collaboration with The San Diego Foundation	\$24,998 (total value with leveraging, \$96,833)	EPA/BECC and in- kind support from community thru volunteer cleanups and educational outreach.	Steve Wright, 4-Walls, steve0.wright@gmail.com  Waylon Matson, 4-Walls, waylonmatson@gmail.com	Metrics: Promote zero waste practices through the collection of plastic bottles and use these as repurposed trash to create sustainable equipment for local regional parks.  Results: Created benches and other park improvements in Los Sauces park in Tijuana and at Border Field State Park in San Diego, using repurposed trash collected through community-cleanups in the Tijuana River Watershed.  4000 plastic bottles, 276 glass bottles, and 100 lbs. trash repurposed; 1000 native plants planted, 185 volunteers engaged.	
Increase public and private sector knowledge on sound management of electronic waste (E-waste) through outreach campaign and training program on two, distinct E-waste recycling certification programs: Responsible Recycling (R2) and E-stewards.	R2-Solutions and E-Stewards EPA Reg. 6 & 9	Less than \$5K	EPA/BECC and other funding: leverage in-kind support from certifying organizations.	Emily Pimentel, pimentel.emily@epa.gov	Metrics: EPA Region 9 and 6 co-hosted border wide webinars on the R2 and e-Stewards voluntary certification program to promote the sound management of electronic waste.  Results: Border-wide Responsible Recycling (R2) webinar: 83 participants E-Stewards: 74 participants. Webinar link: http://www2.epa.gov/border2020/goal-3-task-forces-promote-materials-and-waste-management-and-clean-sites-region-9-border	Completed.
Increase public and private sector knowledge about zero waste programs through a training workshop on California's Zero Waste Program and Mexico's national strategy for managing special waste (i.e. overview of Mexico's Norm 161 on "special waste" management strategies by waste stream and required special waste plans (focus on end-of-life vehicles).	Cal-Recycle and SEMARNAT	In-kind support from collaborating organizations		E. Pimentel; (EPA); Sergio Gasca, SEMARNAT; Howard Levenson, Cal-Recycle	Metrics: Complete at least one training event in CA/'Baja CA region (e.g. webinar-workshop). Measure number of participants trained.  Results: Project being re-designed to be part of regional symposium in Fall 2015.	Ongoing. This action will be included in the 2015-2016 Action Plan

Objective 2: By 2014, identify priority waste streams and by 2020 develop sustainable material management practices that strengthen their respective market value.

Increase E-waste certification opportunities by offering training to recyclers meeting threshold requirements for certification based on Responsible Recyclers (R2) and e-Stewards programs.	R2-Solutions and E-Stewards; EPA/ SEMARNAT/ DTSC/ SPA	\$52,500 (plus matching funds)	EPA/BECC: leverage in-kind	EPA; Emily Pimentel Pimentel,emily@epa.gov	Metrics: Complete training of at least five firms (in CA border region).  Measure number of individuals and business/institutions that participate in the training; track any new firms taking steps to get certified by 2020 in Mexico.  Results: Grant awarded to Fundación Hélice for work in Mexicali; project to be carried into next two year action plan.	Ongoing. This action will be included in the 2015-2016 Action Plan
Construction of an urban solid waste and special waste (RME) transfer station in Poblado la Rumorosa, Delegation La Rumorosa, Municipio Tecate, B.C.	SEMARNAT/ Dirección General de Fomento Ambiental Urbano y Turístico (DGFAUT)	\$227,000	SEMARNAT Annex 30, PEF 2014	Alfonso Blancafort (SEMARNAT) Alfonso.blancafort@semarnat.gob .mx	Metrics: Construct an urban solid waste and special waste transfer station in Tecate, Baja Ca.  Results: Site selection study and construction of an urban solid waste transfer center in Tecate, Baja California, is ongoing.	This action will be included in the 2015-2016 Action Plan
Cleanup, remediation, and closure of open dump located in "Paso del Aguila" km 140+600 Carretera Libre Tijuana Tecate in the municipality of Tecate, B.C.	SEMARNAT/ Dirección General de Fomento Ambiental Urbano y Turístico (DGFAUT)	\$227,000	SEMARNAT Annex 30, PEF 2014	Alfonso Blancafort (SEMARNAT) Alfonso.blancafort@semarnat.gob .mx	Metrics: Closure of an open dump located in the municipality of Tecate, Baja CA.  Results: Information not available at this time.	Ongoing. This action will be included in the 2015-2016 Action Plan
Construction of an urban solid waste dump and special waste (RME) transfer station in Delegación Maneadero, Municipio Ensenada, B.C.	SEMARNAT/ Dirección General de Fomento Ambiental Urbano y Turístico (DGFAUT)	\$227,000	SEMARNAT Annex 30, PEF 2014	Alfonso Blancafort (SEMARNAT) Alfonso.blancafort@semarnat.gob .mx	Metrics: Construction of a special waste transfer station in Ensenada, Baja California, is ongoing.  Results: Information on solid waste dump not available at this time.	Ongoing. This action will be included in the 2015-2016 Action Plan
Construction and equipping of the Scrap Tires Transfer Station for the Metro Tijuana/Tecate/Playa de Rosarito area	Cities of Tijuana, Tecate, Rosarito, BC-SPA, SEMARNAT	\$87,300	SPA y/o SEMARNAT		Metrics: Complete construction of tire transfer station in Baja CA border region Metro area.  Results: Construction completed and facility began operation in 2013.	Completed.

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

Improve remediation knowledge associated with specific chemical waste streams (e.g. pesticides, mine tailings) and industry waste categories (e.g. metal smelters) by providing training (via webinar or half-day workshop) in coordination with EPA's Clean-up Information Program (www.clu-in.org).	EPA, SEMARNAT/ INE (coordinate with EPA's CLU- IN and University of AZ Dean Carter Binational Center.	\$5,000	In-kind EPA, SEMARNAT,	Emily Pimentel Pimentel.Emily@epa.gov TDB (SEMARNAT);	Metrics: One training that applies to border in CA/Baja.  Measure number of individuals and business/institutions that participate in the training  Results: Cancelled.  Will assess topical priorities for next two-year action plan.	Cancelled.
Objective 4: On an annual basis,  Coordinate with EPAHQ and SEMARNAT-Mexico City to implement Consultative Mechanism in coordination with California/Baja CA.	CA Dept. of Toxic Substances (DTSC) and Baja CA Secretary for Environmental		In-kind EPA, SEMARNAT, and State staff	Rick Picardi (EPA HQ); Picardi.Rick@epa.gov  Eduardo González Hernández (SEMARNAT)	Metrics: Annually report, unless there are proposed new facilities in which case the respective countries should be notified within 30 days of a petition for a facility permit.  Results: Last U.S. report submitted October 2014. Annual activity	This action will be included in
CAL	IFORNIA-BAJA CA	LIFORNIA BO	ORDER 2020 MA	ASTER ACTION PLA	AN - Final Closeout Report 2013-201	14

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		Goal 4- En	hance Joint Prej	paredness for Environm	ental Response	
Description of Action	Degional Warkgroup	Cont	Sources of	D.: 4 CC 4 4	2014 F	

Funding

Cost

**Description of Action** 

Regional Workgroup

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.

**Points of Contact** 

2014 Target Output

Status

Table top exercises in Tijuana and in San Diego.  Objective 2: By 2020, at least eight (Secapacity building.	CA/BC  8) of the sister city joint co	\$100,000	EPA Superfund	Bill Jones - USEPA (jones bill@epa.gov)  with preparedness and pre	Metrics: Table top exercises in Tijuana and in San Diego. Make recommendations for improvements.  Results: Table Top Exercises in Tijuana and San Diego region resulted in the following:  – July 2013, 1st Responder Training,  – July 2013, Port of Entry Release Exercise, Otay Mesa (San Diego)  – July 2014, Ammonia Release Exercise, Tecate (Tijuana region),  – September 2014, 120 hour HazMat Tech Training.	risk analysis, and/or
Supplement San Diego/Tijuana Sister City Plan.  Objective 3: By 2016, the US-Mexico	CA/BC	\$60,000	EPA Superfund	Bill Jones - USEPA (jones.bill@epa.gov)	Metrics: Update and finalize the SD/Tijuana Sister City Plan.  Results: Plan completed January 2014.  ssemination along the border.	Completed.
Distribution of DOT Emergency Response Guide.	CA/BC	\$2,500	EPA Superfund	Bill Jones - USEPA (jones.bill@epa.gov)	Metrics: Distribute Spanish copies of Department of Transportation emergency response guide.  Results: 750 Spanish copies of Department of Transportation emergency response guide distributed. Hard copies were distibuted in conjunction with the exercises, trainings and Task Force mtgs.  http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_7E6DBD072A5456A1CC2F6B019DF9EAC03D074600/filename/ERG2012_sp.pdf	Completed.
Distribution of Incident Command System, Personal Protective Equipment, Fire Safety, Radiation Safety, Mercury Response, First Responder Awareness.	CA/BC	\$10,000	EPA Superfund	Bill Jones - USEPA (jones.bill@epa.gov)	Metrics: Distribute emergency response materials in Spanish.  Results: All training materials, guidebooks, instruction manuals and meeting minutes, were distributed in Spanish.	Completed.

No activities proposed.						
				RDER 2020 MASTER	R ACTION PLAN – Final Closeout l ntal Stewardship	Report 2013-2014
Description of Action	Collaborating Organizations	Cost	Sources of Funding	Points of Contact	2013-2014 Target Outputs and Results	Status
Objective 1: By 2020, strengthe ddition, ensure that land ports-upport Hazardous Waste port-of-	en effective information sharin-of-entry have sufficient inspe	ction capacity to poli	Mexican agencies re ce hazardous waste	shipments.	Metrics: Police California ports-of-entry (POE) at	treatment or disposal. In Ongoing.
ntry inspections at the POEs in California's commercial land ports.	Control (DTSC) and San Diego County (SDC) Local Enforcement Agency with U.S. Customs		(RCRA STAG) funds	Pimentel.emily@epa.gov	Otay Mesa and Calexico.  Results: Inspected 3,987 trucks entering the U.S. through the Otay Mesa and Calexico ports-of-entry for compliance with hazardous waste laws; issued 10 NOVs.  DTSC strengthened binational preparedness through chemical release training and information exchange at the ports-of-entry. Highlights include: (a) Hazardous waste training in Tijuana on 3/14 which reached 180 participants; and (b) Hazardous waste management training on 5/21/14 which reached 150 maquiladora participants.	This action will be included in the 2015-2016 Action Plan

assistance to comply with California's	Cal-Recycle and CA Highway Patrol	Cal-Recycle program staff	f CA Tire Fund.	Keith Cambridge, Keith.Cambridge@CalRecycle.ca.		Ongoing. This action will be included in
tire management program in partnership with other agencies.				gov	facilities. Provide outreach on program requirements and activities.	the 2015-2016 Action Plan
					Results: Cal-Recycle held a tire workshop in English and Spanish on October 2014 in San Diego. Thirty (30) tire haulers attended.	
					Cal-Recycle maintains a registry which listed approximately 40 Mexican used tire haulers and 205 Baja CA "in-use" facilities in 2014.	
					Cal-Recycle shared program information with the border-waste task force; reported on waste tire domestic and international markets in the 2014 Tire Workshop; and updated border activities in the 5-year Tire Plan in May 2013.	
Monitor and provide compliance assistance to comply with California's program to recover and recycle covered electronic waste (CEW) generated by CA residents and businesses.	Cal-Recycle	Cal-Recycle program staff	CA CEW fund.	Jeff Hunts Jeff.Hunts@CalRecycle.ca.gov	Metrics: Provide outreach on program requirements and share information on pertinent border activities.  Results: Shared program information at border waste task force and other meetings.	Ongoing. This action will be included in the 2015-2016 Action Plan
				enrolled in the National Progra	am for Environmental Auditing (PNAA) and/	or similar programs at the
state level for facilities not regulat				enrolled in the National Progra	am for Environmental Auditing (PNAA) and/o This is a Borderwide Policy Forum action. See Enforcement Policy Forum Action Plan.	or similar programs at the
state level for facilities not regular  Conduct audits through the National  Program for Environmental Auditing  Program (PNAA).	PROFEPA.  Release Inventory (TRI) and	nt, using 2012 as a base	of Emissions and	Transfers of Pollutants (RETC	This is a Borderwide Policy Forum action. See	

## CALIFORNIA-BAJA CALIFORNIA BORDER 2020 MASTER ACTION PLAN – Final Closeout Report 2013-2014 Environmental Health Fundamental Strategy

Environmental Health Fundamental Strategy								
Description of Action	Collaborating Organizations	Cost	Sources of Funding	Points of Contact	2013-2014 Target Outputs and Results	Status		
EPA and the U. S. Section of the Border Health Commission formally adopt a Border Health Collaborative Agreement to leverage mutual resources to improve environmental health along the U.SMexico border.	CDPH, ADHS, EPA, HHS	\$0	HHS, EPA, CDPH, ADHS, USBHC, partners	Alheli Banos-Keener (EPA), Carlos Rincon (EPA), Lisa Almodovar (EPA), April Fernandez (CDPH), Robert Guerrero (AZDHS), Jose Luis Velasco (HHS-BHC)	Metrics: Adopt a new Collaborative Agreement between EPA and USBHC on environmental health.  Results: Agreement reached in August 2014 with commitments and goals to be implemented for the next 2 years. See web-page for more information: www.epa gov/Border2020	Ongoing. This action will be included in the 2015-2016 Action Plan.		
Provide pediatric environmental health information to Mexican health officials, health care providers, promotores, childcare providers, nurses, health educators and teachers on Pediatric Environmental Health.	- EPA, - UC San Francisco, - UC Irvine (UCI), - Imperial Valley Child Asthma Program (IVCAP), - Imperial County Office of Education (ICOE), - Pediatric Environmental Health Specialty Unit (PEHSU), - U.SMX Border Health Commission (BHC)	\$44,000	Program, - Border Environment	EPA: Alheli Banos-Keener, Dave Fege, Leanna Rosetti,	Metrics: Provide pediatric environmental health information to key community stakeholders.  Results: Doctors from the Region 9 Pediatric Environmental Health Specialty Unit (PEHSU) gave two separate workshops in Imperial Valley. Simultaneous translation was provided. Over 75 participants learned about pediatric environmental health topics and environmental health risks affecting residents along the border.	Completed.		

Implement Integrated Pest Management Training for schools.	CA DPR	Staff time	CA	Allison Fish (DPR)	Metrics: Implement Integrated Pest Management (IPM) Training for schools.	Completed.
					Results: The California Department of Pesticide Regulation conducted an Integrated Pest Management training on April 4, in Brawley, CA. Trained approximately 75 participants, school administrators, grounds keepers, and teachers on IPM.	
Partner with the BHC during Border Binational Health Week in 2013 and 2014 to share environmental health expertise with border health partners.	- EPA, - IVCAP (NGO), - Imperial County Children and Families First Commission, - El Centro Regional Medical Center, - Imperial County Air Pollution Control District, - US-Mexico Border Health Commission	Staff time	IVCAP, IVAPCD, BHC, other sponsors	Alheli Banos-Keener, Banos.alheli@epa.gov April Fernandez (COBBH) April.Fernandez@cdph.ca.gov	Metrics: Share environmental health information with key community stakeholders.  Results: Environmental Health Information was shared at the 2013 and 2014- Asthma Forums in Imperial Valley. The Forums reached over 300 people and included presentations from students on Asthma awareness and air quality.	Completed.