

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

### GOAL 1: – REDUCE AIR POLLUTION

#### Objective 1: Establish reliable and sustainably operated air monitoring networks and provide real-time access to air quality data

Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Install and operate NO <sub>y</sub> and CO Monitors in San Luis Rio Colorado, Sonora (SN)	<p>Arizona Department of Environmental Quality (ADEQ),</p> <p>United States Environmental Protection Agency (USEPA),</p> <p>Commission of Ecology and Sustainable Development (CEDES)</p> <p>San Luis Rio Colorado Water, Sewerage and Sanitation Operating Agency (OOMAPAS)</p>	<p>ADEQ, CEDES, OOMAPAS staff time</p> <p>USEPA 105 grant</p>	<p>Gerardo Monroy (ADEQ) <a href="mailto:monroy.gerardo@azdeq.gov">monroy.gerardo@azdeq.gov</a></p> <p>Judith Araujo (CEDES) <a href="mailto:Judith.araujo@sonora.gob.mx">Judith.araujo@sonora.gob.mx</a></p> <p>Alejandro Hernández (CEDES) <a href="mailto:Alejandro.hernandez@sonora.gob.mx">Alejandro.hernandez@sonora.gob.mx</a></p>	<ul style="list-style-type: none"> <li>Install and operate a NO<sub>y</sub> and CO monitors in San Luis Rio Colorado (SLRC), SN.</li> </ul>	<ul style="list-style-type: none"> <li>ADEQ will collect NO<sub>y</sub> and CO data to complement the O<sub>3</sub> data currently being collected at SLRC.</li> <li>Information will be shared with the municipality of San Luis Río Colorado, Sonora to update the air quality diagnostics.</li> </ul>	Initial Progress
Air monitoring in Nogales, Sonora	<p>Arizona Department of Environmental Quality (ADEQ),</p> <p>United States Environmental Protection Agency (USEPA),</p> <p>Commission of Ecology and Sustainable Development (CEDES)</p>	<p>ADEQ, CEDES and ITN staff time and USEPA 105 grant</p>	<p>Gerardo Monroy (ADEQ) <a href="mailto:monroy.gerardo@azdeq.gov">monroy.gerardo@azdeq.gov</a></p> <p>Judith Araujo (CEDES) <a href="mailto:Judith.araujo@sonora.gob.mx">Judith.araujo@sonora.gob.mx</a></p> <p>Alejandro Hernández (CEDES) <a href="mailto:Alejandro.hernandez@sonora.gob.mx">Alejandro.hernandez@sonora.gob.mx</a></p>	<ul style="list-style-type: none"> <li>Operate O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> monitors in Nogales, SN</li> <li>This is an on-going project.</li> </ul>	<ul style="list-style-type: none"> <li>Implement regular equipment maintenance and Quality Assurance (QA).</li> <li>Quality Control (QC) checks.</li> <li>Share data with CEDES.</li> <li>Provide information to the City Council of Nogales, Sonora to update the air quality diagnoses of the Management Program to Improve Air Quality (ProAire) for Nogales, SN.</li> </ul>	Deliverable Achieved

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

GOAL 1: – REDUCE AIR POLLUTION						
Monitoring in Nogales, Douglas, Paul Spur and Yuma, Arizona	Arizona Department of Environmental Quality (ADEQ)	ADEQ staff time	Gerardo Monroy (ADEQ) <a href="mailto:monroy.gerardo@azdeq.gov">monroy.gerardo@azdeq.gov</a>	<ul style="list-style-type: none"> <li>Continue monitoring activities in Arizona border communities: Nogales (PM<sub>10</sub>, PM<sub>2.5</sub>); Yuma (O<sub>3</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>); Douglas (PM<sub>10</sub>); Paul Spur (PM<sub>10</sub>)</li> </ul>	<ul style="list-style-type: none"> <li>Continue reporting air quality data publicly to <a href="#">AirNow</a></li> </ul>	Deliverable Achieved
<p><b>Objective 1a:</b> <i>By 2023, increase knowledge-transfer and provide at least one training opportunity on performance standards and applications of low-cost air quality sensors.</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 1b:</b> <i>By 2024, develop and implement a sustainable funding mechanism for air quality monitoring in at least one Mexican state.</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 1c:</b> <i>By 2025, ensure that all air quality agencies operating one or more regulatory air quality monitors have developed a monitoring network plan (ideally in cooperation with other agencies in the same airshed) and a quality assurance project plan.</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 2: Increase the quality and exchange of data from emissions inventories across the border and among federal, state, local, Tribal governments and Mexican Indigenous communities and Afro-Mexican people.</b></p>						
<p><b>Objective 2a:</b> <i>By 2023, strengthen intergovernmental linkages, increase the exchange of information, and pursue greater harmonization when developing and improving national, state, and municipal emissions inventories, starting with at least two binational airsheds. The initial focus will be on “criteria” pollutants and their precursors (particulate matter, carbon monoxide, lead, sulfur dioxide, nitrogen oxides, volatile organic compounds, and ammonia)</i></p>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Inventory of Emissions Inventories: Summary of Methodologies for Mexico and US National Emissions Inventories	United States Environmental Protection Agency (USEPA) Texas Commission on Environmental Quality; New Mexico Environment Department, Secretariat of Environment and Natural Resources (SEMARNAT)	EPA-led and co-developed with SEMARNAT Staff time.	Carrie Wheeler (USEPA) <a href="mailto:wheeler.carrie@epa.gov">wheeler.carrie@epa.gov</a>	<ul style="list-style-type: none"> <li>Activity to support border-wide effort to encourage communication about the methodologies used to develop existing emissions inventories to better understand emissions in the border region.</li> <li>Facilitate efforts to harmonize the content and development of future releases of the U.S. and Mexico national emission inventories.</li> </ul>	<ul style="list-style-type: none"> <li>English/Spanish report completed in February 2022.</li> </ul>	Deliverable Achieved

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

GOAL 1: – REDUCE AIR POLLUTION						
Development of the emissions inventory for stationary sources of state jurisdiction in Sonora corresponding to the year 2022	Commission of Ecology and Sustainable Development (CEDES)	CEDES staff time	Judith Araujo (CEDES) <a href="mailto:Judith.araujo@sonora.gob.mx">Judith.araujo@sonora.gob.mx</a>  Alejandro Hernández (CEDES) <a href="mailto:Alejandro.hernandez@sonora.gob.mx">Alejandro.hernandez@sonora.gob.mx</a>	<ul style="list-style-type: none"> <li>Share report with state and local agencies.</li> <li>Inventory will include bordering municipalities.</li> <li>By March 2023, have the draft emissions inventory.</li> </ul>	<ul style="list-style-type: none"> <li>By July 2023, have a final emissions inventory for said sources.</li> </ul>	Initial Progress
<p><b>Objective 2b:</b> <i>By 2024, expand technical training to promote standardized approaches to emissions inventory development (including source measurement and testing) and maintenance.</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 3: Reduce vehicle emissions in the border region, including by establishing or strengthening programs that reduce the number of vehicles that do not comply with vehicle emissions standards.</b></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 3a:</b> <i>By 2024, increase cross-border (interagency, interstate, and international) access to databases that officials can use to verify that used vehicles meet emission standards</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 3b:</b> <i>By 2025, implement new vehicle inspection and maintenance programs or improve the existing programs, achieving at least 50% compliance in two or more Mexican states.</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 3c:</b> <i>By 2025, reduce emissions from freight transportation in the border region by increasing information exchange and harmonization between U.S. EPA’s SmartWay program and Mexico’s Transporte Limpio program.</i></p> <p>*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 4: Deploy strategies and technologies to reduce pollutant emissions and improve public health outcomes</b></p>						

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

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Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Yuma PM <sub>10</sub> control measure State Implementation Plan (SIP)	Arizona Department of Environmental Quality (ADEQ)	ADEQ/EPA Staff time and USEPA Performance Partnership Agreements Grant (PPG)	Lisa Tomczak (ADEQ) <a href="mailto:Tomczak.lisa@azdeq.gov">Tomczak.lisa@azdeq.gov</a>	<ul style="list-style-type: none"> <li>Reasonable air controls to incorporate into rule that will be incorporated into a SIP.</li> </ul>	<ul style="list-style-type: none"> <li>Control measure SIP submittal</li> <li>Re-designation Request/Maintenance Plan</li> <li>Final SIP submittal</li> <li>Ongoing in 2021.</li> </ul>	Significant Progress
Douglas/Paul Spur PM <sub>10</sub> control measure SIP	Arizona Department of Environmental Quality (ADEQ) Environmental Protection Agency (USEPA)	ADEQ/EPA Staff time and USEPA PPG grant	Samantha Schaffer (ADEQ) <a href="mailto:Schaffer.samantha@azdeq.gov">Schaffer.samantha@azdeq.gov</a>	Develop and implement the following steps : <ul style="list-style-type: none"> <li>An Attainment Analysis</li> <li>A Base Emission Inventory</li> <li>A Control Analysis</li> <li>Modeling</li> </ul>	<ul style="list-style-type: none"> <li>Attainment Analysis</li> <li>Ongoing in 2021.</li> </ul>	Initial Progress
<p><b>Objective 4a:</b> By 2023, implement a program on air-quality-related health effects and/or a communication campaign on air-quality-related health risks and mitigation measures in at least one additional urban airshed (e.g., a public awareness campaign on the health impacts of agricultural burning or trash burning)</p>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Disseminate information on the effects on human health of exposure to air pollutants generated by agricultural and waste burning	Commission of Ecology and Sustainable Development (CEDES)	CEDES staff time	Judith Araujo <a href="mailto:Judith.araujo@sonora.gob.mx">Judith.araujo@sonora.gob.mx</a>  Alejandro Hernández (CEDES) <a href="mailto:Alejandro.hernandez@sonora.gob.mx">Alejandro.hernandez@sonora.gob.mx</a>	<ul style="list-style-type: none"> <li>Agency to reach whole state of Sonora, to including border municipalities.</li> <li>Outreach tools to include videos, and infographics</li> <li>Effort to include recommendations to prevent these events.</li> <li>By December 2023, published twelve videos or infographics on the web pages and social networks of the CEDES and City Councils.</li> </ul>	<ul style="list-style-type: none"> <li>Raise awareness among the populations of the state of Sonora, including border municipalities, about the effects on human health of exposure to air pollutants generated by agricultural and waste burning.</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

### GOAL 1: – REDUCE AIR POLLUTION

**Objective 4b:** By 2025, implement at least two policy-based (e.g., multi-pollutant assessment, co-mitigation of short-lived climate pollutants, and Global Methane Initiative) or technology-based (e.g., renewable energy financing or other incentives) programs targeting specific pollutants or sectoral emissions of local concern.

\*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <https://www.epa.gov/border2020/region-9-action-plans>

**Objective 4c:** Implement additional emission reduction strategies consistent with applicable State Implementation Plans (SIPs) and PROAIRES.

\*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <https://www.epa.gov/border2020/region-9-action-plans>

**Objective 5: By 2025, support update and/or 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**

Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Publication and implementation campaign of the State of Sonora's Climate Change Program (PECCS) to municipalities of the state of Sonora	Intersecretarial Commission on Climate Change (CICC), Commission of Ecology and Sustainable Development (CEDES)	CEDES and CICC Staff Time	Diana Durazo (CEDES) <a href="mailto:Diana.durazo@sonora.gob.mx">Diana.durazo@sonora.gob.mx</a>  Liliana Araujo (CEDES) <a href="mailto:Liliana.araujo@sonora.gob.mx">Liliana.araujo@sonora.gob.mx</a>	<ul style="list-style-type: none"> <li>Post the PECCS on the CEDES page.</li> <li>Hold three CICC meetings a year.</li> <li>Have a published issue of PECCS.</li> </ul>	<ul style="list-style-type: none"> <li>Publication of the PECCS in the Official Gazette of the Government of the State of Sonora by June 2022.</li> <li>Implementation of an important campaign for its dissemination in digital media in 2023, in the municipalities of the state of Sonora, including those that are border.</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

GOAL 2: IMPROVE WATER QUALITY						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
<p><b>Objective 1: Address Border Water Management in the Tijuana River Watershed.</b> The EPA and SEMARNAT are to coordinate with specific federal, state, and local entities to plan and implement high priority infrastructure projects that address transboundary pollution affecting the Tijuana River watershed.*Not applicable to this region. For more information on past action plan activities, please visit: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><i>Objective 1a: Carry out the planning, design, construction, and operation and maintenance of high priority treatment works in the Tijuana River Watershed.</i> *Not applicable to this region. For more information on past action plan activities, please visit: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><b>Objective 2: Improve Drinking Water and Wastewater Treatment Infrastructure.</b> Ten drinking water and/or wastewater projects will be developed and certified by the NADB Board of Directors by 2025 under the Border Water Infrastructure Program. *There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						
<p><i>Objective 2a: Increase access to safe drinking water and wastewater treatment in underserved communities</i></p>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Naco, SN – Wastewater collection and treatment rehabilitation	North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border Water Infrastructure Fund (BWIP): \$340K	Gerardo Calza (NADB) <a href="mailto:gcalza@nadb.org">gcalza@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>	<ul style="list-style-type: none"> <li>Determine the most appropriate, efficient, and sustainable solution (scope) to eliminate 0.9 mgd of runoff and transboundary flows of untreated wastewater.</li> </ul>	<ul style="list-style-type: none"> <li>February 2022 – Diagnostic study completed</li> <li>Complete NADB certification of project.</li> </ul>	Moderate Progress
Nogales, SN – Colinas del Sol and Colonia Bella Vista Wastewater Collection and Wastewater Treatment Plant	North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border Water Infrastructure Program (BWIP): \$205K	Gerardo Calza (NADB) <a href="mailto:gcalza@nadb.org">gcalza@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>	<ul style="list-style-type: none"> <li>The proposed project will expand the municipality's wastewater collection and treatment system, providing wastewater treatment to these unserved communities.</li> </ul>	<ul style="list-style-type: none"> <li>Complete NADB certification of project.</li> </ul>	Moderate Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

<b>Objective 2b: Reduce discharges of untreated wastewater into the oceans and transboundary rivers such as those in the Tijuana River, New River, Santa Cruz River, and the Rio Grande/Rio Bravo watersheds</b>						
<b>Description of Action</b>	<b>Collaborating Organizations</b>	<b>Cost and Source</b>	<b>Lead Points of Contact</b>	<b>Target Outputs</b>	<b>Expected Results in 2021-2023</b>	<b>Status</b>
Nogales, AZ – International Outfall Interceptor (IOI) Laterals Connections and Erosion Protection	North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border Water Infrastructure Program (BWIP): \$2.8M	Gerardo Calza (NADB) <a href="mailto:gcalza@nadb.org">gcalza@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>	<ul style="list-style-type: none"> <li>Decommissioned 5 laterals, 3 of which will be relocated to the nearest existing manhole on the IOI</li> <li>Project includes bank erosion protection at critical areas that could compromise the IOI infrastructure and City's water main, which services nearly 50% of the city.</li> </ul>	<ul style="list-style-type: none"> <li>2021 – Final design completed.</li> <li>Jan 2022 – Laterals construction completed.</li> <li>2022 - Erosion protection to be completed.</li> </ul>	Significant Progress
Nogales, SN – Expansion of Los Alisos Wastewater Treatment Plant Modules 3 and 4	North American Development Bank (NADB) US Environmental Protection Agency (USEPA)	Border Water Infrastructure Program (BWIP0): \$275K	Gerardo Calza (NADB) <a href="mailto:gcalza@nadb.org">gcalza@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>	<ul style="list-style-type: none"> <li>Expansion of treatment plant from 5 to 10 mgd</li> </ul>	<ul style="list-style-type: none"> <li>2021 – Final design of module 3 completed</li> <li>Complete NADB certification of project.</li> </ul>	Moderate Progress
Development of a treatment or post-treatment pilot project plan	International Boundary and Water Commission (IBWC) North American Development Bank (NADB) US Environmental Protection Agency (USEPA) Arizona Department of Environmental Quality (ADEQ))	TBD	Albert Flores (IBWC) <a href="mailto:Albert.flores@ibwc.gov">Albert.flores@ibwc.gov</a>  Gerardo Calza (NADB) <a href="mailto:gcalza@nadb.org">gcalza@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>  Claudia Gil (ADEQ) <a href="mailto:Gil.claudia@azdeq.gov">Gil.claudia@azdeq.gov</a>	<ul style="list-style-type: none"> <li>Project plan will look at the flows that are currently discharging in northeast Nogales, Sonora, towards the tributaries of the Santa Cruz River in the “Cerro Pelon” and “Oso Wash” and are directly introduced into the United States</li> <li>Develop a Pilot Project Plan by 12/31/2023.</li> </ul>	<ul style="list-style-type: none"> <li>Pending discussion on the development of a Pilot Project Plan for 12/31/2023</li> </ul>	No Progress
<b>Objective 3: Improve O&amp;M of Drinking Water and Wastewater Infrastructure</b>						
<b>Objective 3a: Ensure that infrastructure projects funded by the U.S. or Mexico have adequate Operations and Maintenance (O&amp;M) reserves and long-term planning</b>						

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Discussions on Operations & Maintenance (O&M) with the City of Naco are in progress	North American Development Bank (NADB) US Environmental Protection Agency (USEPA), Comisión Estatal de Agua de Sonora (CEA), and Arizona Dept. Environmental Quality (ADEQ)	TBD	Roberto Molina (NADB) <a href="mailto:rmolina@nadb.org">rmolina@nadb.org</a>	On-going discussion. No progress to report	Development and implementation of a sustainable, long-term Operation and Maintenance (O&M) plan	No Progress
<b>Objective 3b:</b> Build capacity at water utilities through training and programs that improve the following: Asset management; Wastewater pretreatment (treatment of industrial wastewater discharged to a public wastewater treatment plant); Operational, managerial, and financial management.						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Wastewater pretreatment of heavy metals and Reuse at Nogales, SN	Secretary of Urban Development and Ecology / Department of Ecology, Secretariat of Sustainable Development Ecology, (CEDES), North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border 2025 Program: \$48,413  Leverage: \$60,794	Adrian Guerrero <a href="mailto:agm1804@hotmail.com">agm1804@hotmail.com</a>  Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>	Proposal will address two high priorities of the Ambos Nogales area: <ul style="list-style-type: none"> <li>Pretreatment of wastewater in Nogales, SN to reduce or eliminate heavy metals that negatively impact the operations at the Nogales International Waste-Water Treatment Plant (WWTP) in Rio Rico, AZ, and the quality of the effluent that the plant discharges into the Santa Cruz River;</li> <li>The reuse of treated wastewater for green infrastructure purposes (irrigation of green areas, construction, toilet flushing, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>2021 – workplan completed</li> <li>Spring 2022 – complete QAPP</li> <li>Design, construction, and evaluation of pilot project using natural processes to reduce heavy metal concentrations in industrial wastewater.</li> <li>Recommendations to local and state agency representatives to establish a water reuse master plan for the Municipality of Nogales.</li> </ul>	Initial Progress
Collaborate with the National Association of Clean Water Agencies (NACWA)	NACWA, Drinking Water, Sewerage and Sanitation Operating Agency (OOMAPAS), Arizona Department of Environmental Quality (ADEQ),	N/A	Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>  Joaquin Marruffo (ADEQ) <a href="mailto:jmarruffo@azdeq.gov">jmarruffo@azdeq.gov</a>	<ul style="list-style-type: none"> <li>Work in partnership with NACWA to find meaningful and effective means to build up utility capacity for disadvantaged border utilities.</li> <li>Implement Trainings in coordination with Program partners as the City of Phoenix-OOMAPAS Pretreatment</li> </ul>	<ul style="list-style-type: none"> <li>As of Oct 2019, stakeholders met in AZ for initial brainstorming session to aid OOMAPAS</li> <li>2021 - City of Phoenix-OOMAPAS Pretreatment Training. About 25 participants included: Water Utilities from Nogales and Agua Prieta, Sonora (OOMAPAS), among</li> </ul>	Significant Progress



## Arizona-Sonora 2021-2023 Border 2025 Action Plan

	US Environmental Protection Agency (USEPA)			Training to improve utility capacity in the AZ-SN border region.	others. • Continue to coordinate training opportunities	
<b>Objective 4: Promote beneficial reuse of treated wastewater and conservation of water and energy</b>						
<b>Objective 4a:</b> Assess opportunities to fund wastewater reuse projects through the infrastructure program, complying with current regulations.						
*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a> .						
<b>Objective 4b:</b> Develop at least one wastewater reuse pilot project, or one utility-driven water/energy audit.						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Develop wastewater reuse design on Cocopah Tribal Lands	Cocopah Indian Tribe, North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border 2025 Subgrant: \$45,563  Leverage: \$8,330	Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Emily Pimentel (USEPA) <a href="mailto:Pimentel.emily@epa.gov">Pimentel.emily@epa.gov</a>	<ul style="list-style-type: none"> <li>Project to assess the water quality of City of Yuma's treated wastewater and develop a design to discharge wastewater into the Colorado River on Cocopah tribal lands for beneficial reuse as part of a riparian/wetland restoration.</li> <li>Will lead to the tribe's plan to better adapt to climate change and complement other on-going environmental efforts.</li> </ul>	<ul style="list-style-type: none"> <li>Expected results include the tribes' efforts to design a Wetland Restoration plan for beneficial reuse of wastewater discharged from the City of Yuma Treatment Plant.</li> </ul>	Initial Progress
Binational trainings for sediment pollution retention in Sonora and Arizona	Borderlands Restoration Network, North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border 2025 Program subgrant: \$64,975	Tess Wagner <a href="mailto:twagner@borderlandsrestoration.org">twagner@borderlandsrestoration.org</a>  Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>	<ul style="list-style-type: none"> <li>Proposal seeks to improve best management practices for watershed sediment pollution retention on both sides of the Arizona/Sonora border.</li> <li>Proposal will implement two workshops on both sides of the border and will demonstrate appropriate ecological restoration approaches;</li> <li>To include the construction of 50 erosion control structures that will reduce sediment transport and re-establish native vegetation communities.</li> <li>Implement two weeks of free</li> </ul>	<ul style="list-style-type: none"> <li>2021 – workplan completed</li> <li>Two ecological restoration Workshops targeted for 24 participants from the region.</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

				watershed restoration training and networking for residents of the Arizona/Sonora communities.		
Produce a binational and sustainable strategy to address stormwater control, urban flooding, and water quality concerns in Ambos Nogales (Sonora and Arizona)	Arizona State University (ASU), North American Development Bank (NADB), Environmental Protection Agency (USEPA)	Border 2020 Subgrant: \$100,000 Leverage: \$28,880	Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Francisco Lara-Valencia (ASU) <a href="mailto:Francisco.Lara@asu.edu">Francisco.Lara@asu.edu</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@EPA.gov">moran.monica@EPA.gov</a>	<ul style="list-style-type: none"> <li>Data integration and modeling using ArcGIS/Collaboration with SCC Public Works and IMIP</li> <li>Usage of Large soil absorption (LSA) system and application of GIS multi-criteria spatial modeling</li> <li>Effort will measure Stormwater yield, infiltration, and runoff at green infrastructure (GI) sites to estimate flows pre/post interventions; hydrographs at watershed and site levels.</li> <li>Application of landscape design and visualization software</li> <li>Systematic review of existing regulatory tools and practices;</li> <li>Dialogue and focus groups with stakeholders to gain insight of regulatory opportunities and incentives for GI adoption.</li> <li>Conduct two workshops and school-based programing (two demonstration projects) in collaboration with the staff in local middle schools in Nogales, Sonora and Nogales, Arizona.</li> </ul>	<ul style="list-style-type: none"> <li>Preliminary model developed to simulate runoff, erosion, and sediment yields within the area covered by the LiDAR imagery.</li> <li>GI design and planning activities conducted in the fall of 2020 and 2021.</li> <li>GI workshop held in the region for local government and university representatives</li> <li>Several meetings held with ADEQ and the Santa Cruz County Flood Control District to receive input regarding project goals and activities, as well as to explore collaboration opportunities.</li> <li>Implemented environmental education activities in local schools to educate &amp; promote information on regional water quality practices.</li> </ul>	Deliverable Achieved
Follow-up project on the "Ambos Nogales Sustainable Strategies for Stormwater and Sanitary Sewer Overflows Control 2019 effort"	Arizona State University (ASU), North American Development Bank (NADB), Environmental Protection Agency (USEPA) Arizona Department of Environmental Quality (ADEQ)	TBD	Francisco Lara-Valencia (ASU) <a href="mailto:Francisco.Lara@asu.edu">Francisco.Lara@asu.edu</a>  Gerardo Calza (NADB) <a href="mailto:gcalza@nadb.org">gcalza@nadb.org</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@EPA.gov">moran.monica@EPA.gov</a> Claudia Gil (ADEQ) <a href="mailto:Gil.claudia@azdeq.gov">Gil.claudia@azdeq.gov</a>	<ul style="list-style-type: none"> <li>Assist in the implementation of one green infrastructure (GI) project in the border communities of Ambos Nogales,</li> <li>Project could be implemented either side of the border - Sep/2023</li> </ul>	<ul style="list-style-type: none"> <li>Pending discussion on GI project.</li> </ul>	No Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

<b>Objective 6: Improve access to transboundary water quality data.</b>						
<i>Objective 6a: Ensure sewage spill notification protocols are in place for all communities affected by transboundary flows of untreated sewage. A sewage runoff model will be developed for Tijuana by 2021. Spill notification protocols will be developed in three high priority watersheds by 2025</i>						
<b>Description of Action</b>	<b>Collaborating Organizations</b>	<b>Cost and Source</b>	<b>Lead Points of Contact</b>	<b>Target Outputs</b>	<b>Expected Results in 2021-2023</b>	<b>Status</b>
Nogales notification protocol	International Boundary and Water Commission (IBWC),/ Comisión Internacional de Límites y Aguas (CILA)	In-kind (FTE time)	IBWC staff	<ul style="list-style-type: none"> <li>Establish a binational notification process for Nogales, AZ – Nogales, SN in the event of transboundary sewage spills notify and address spills in a timely manner.</li> <li>The information specifically is developed for all the utilities and agencies representatives located on both sides of the border so they can coordinate and collaborate to stop any spills.</li> </ul>	<ul style="list-style-type: none"> <li>Established and implemented binational notification protocol</li> <li>Reporting protocols and agency staff roles are clearly defined and better prepared at a time of spills.</li> </ul>	Deliverable Achieved
<i>Objective 6b: Increase awareness of beach contamination from marine debris and untreated sewage through modeling, monitoring (should focus on sources and types of marine debris) and special studies.</i>						
*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a>						
<i>Objective 6c: Ensure that U.S. Section of the International Boundary and Water Commission (IBWC) website displays timely information on water quality in high-priority watersheds including the Lower Rio Grande/Bravo, the New River, the Santa Cruz River and the Tijuana River</i>						
IBWC to maintain informational website to keep public informed on water quality	International Boundary and Water Commission (IBWC)	Staff time	Adrian D. Cortez (IBWC) <a href="mailto:adrian.cortez@ibwc.gov">adrian.cortez@ibwc.gov</a>	<ul style="list-style-type: none"> <li>IBWC staff maintains website: <a href="https://waterdata.ibwc.gov/Data/DataSet/Interval/Latest">https://waterdata.ibwc.gov/Data/DataSet/Interval/Latest</a></li> <li>Information provided in English</li> </ul>	<ul style="list-style-type: none"> <li>IBWC to maintain website</li> </ul>	Significant Progress
<i>Objective 6d: Continue the work of the binational water quality improvement plan as part of the Lower Rio Grande Water Quality Initiative in the Lower Rio Grande below Falcon international Dam</i>						

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

GOAL 3: PROMOTE SUSTAINABLE MATERIALS MANAGEMENT AND WASTE MANAGEMENT, AND CLEAN SITES						
Objective 1: By 2025, share information and experiences on sustainable materials management and resource efficiency practices with local and state-level institutions, tribal governments, and indigenous and Afro-Mexican communities						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Implement practices to safely dismantle scrap (end of life) vehicles, educational workshops, compliance assistance, and enforcement in Nogales, Sonora	Secretary of Urban Development and Ecology (SDUE) Municipality of Nogales, SN, North American Development Bank (NADB), US Environmental Protection Agency (USEPA)	Border 2020 Subgrant: \$21,197  Leverage: \$11,353	Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Adriana Guerrero (SDUE) <a href="mailto:adriana.guerrero@nogalessonora.gob.mx">adriana.guerrero@nogalessonora.gob.mx</a>  André Villaseñor (USEPA) <a href="mailto:Villasenor.andre@epa.gov">Villasenor.andre@epa.gov</a>	<ul style="list-style-type: none"> <li>Identify and survey scrap vehicle business in Nogales, SN</li> <li>Implement workshop on best practices for scrap vehicle business adapted from <a href="#">USEPA end-of-life vehicle guidance</a>.</li> <li>Provide compliance assistance to scrap vehicles business.</li> <li>Strengthen enforcement to prevent dumping associated with scrap vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Completed document and site inventory of scrap vehicles sites in Nogales.</li> <li>Conducted Spanish-language workshop in Nogales with over 100 scrap yard owner/operators on best practices for vehicle dismantling.</li> <li>In 2020, due to COVID 19, virtual presentations on project efforts have been presented at several Task Force and Regional Workgroup Meetings.</li> <li><i>Grant completed August 2021.</i></li> </ul>	Deliverable Achieved
Adapt ADEQ's e-waste collection guidance for cities to Implement e-waste collection events, then implement e-waste collection events in three border cities in Sonora.	Centro de Asesoría Financiera y Emprendimiento Social de la Universidad de Sonora CAFES/USON (nonprofit associated with the University of Sonora, North American Development Bank (NADB) Commission of Ecology and Sustainable Development (CEDES), Environmental Protection Agency (USEPA)	USEPA, NADB Border 2020 Subgrant: \$34,170  Leverage: \$15,155	Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Karina Lopez Ivich, IAMM (associate of CAFÉS/USON) <a href="mailto:karina.ivich@gmail.com">karina.ivich@gmail.com</a>  André Villaseñor (USEPA) <a href="mailto:villasenor.andre@epa.gov">villasenor.andre@epa.gov</a>	<ul style="list-style-type: none"> <li>Adapt ADEQ e-waste collection guidance to safely implement ewaste collection events in Border cities - <a href="https://residuoselectronicos.cedes.gob.mx/">https://residuoselectronicos.cedes.gob.mx/</a></li> <li>Implement three e-waste collection events in border cities in Sonora (Agua Prieta, Nogales, and San Luis Rio Colorado).</li> </ul>	<ul style="list-style-type: none"> <li>Completed outreach to three municipalities to outline requirements for planning collection events.</li> <li>Developed materials to hold virtual workshops in winter of 2020, instead of in-person workshops as originally planned.</li> <li>In 2020, due to COVID-19, virtual presentation on project efforts have been presented at several Task Force and Regional Workgroup Meetings.</li> <li><i>Grant completed in April 2021.</i></li> </ul>	Deliverable Achieved
Development of a data hub and spoke regional recycling program	Arizona State University (ASU), Arizona Department of Environmental Quality	United States Department of Agriculture (USDA) Rural	JB Shaw (ADEQ) <a href="mailto:Shaw.joseph@azdeq.gov">Shaw.joseph@azdeq.gov</a>	<ul style="list-style-type: none"> <li>After data has been collected from surveys and interviews and a cost-benefit analysis model has been developed, ASU and ADEQ plan to</li> </ul>	<ul style="list-style-type: none"> <li>Design a hub and spoke recycling program for rural communities.</li> <li>Provide technical assistance to rural communities through training and a cost-</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

GOAL 3: PROMOTE SUSTAINABLE MATERIALS MANAGEMENT AND WASTE MANAGEMENT, AND CLEAN SITES						
feasibility study	(ADEQ)	Development Grant \$160,000		utilize the model to design up to two regional centralized processing centers (hubs) in surrounding communities (spokes). <ul style="list-style-type: none"> <li>Recycling programs to include the city of Bisbee, AZ, thus creating a model for regional recycling processing centers within larger communities that serve as “hubs” to encourage smaller communities or “spokes” to deliver their recyclables to these hubs.</li> </ul>	benefit analysis tool to design up to 2 hub and spoke recycling systems (Pinetop/Bisbee) by September 2022	
The production of the “Biggest Reducer” video series concentrates on educating communities on the importance of reducing and reusing instead of using single use products	Arizona Department of Environmental Quality (ADEQ)	ADEQ-Staff Time	JB Shaw (ADEQ) <a href="mailto:Shaw.joseph@azdeq.gov">Shaw.joseph@azdeq.gov</a>	<ul style="list-style-type: none"> <li>Develop “Biggest Reducer” video series.</li> <li>Share <a href="#">video series</a> with statewide communities.</li> <li>Add Spanish subtitles to the videos to reach a broader audience, which benefits communities in the US-MX border region.</li> </ul>	<ul style="list-style-type: none"> <li>Finish the remaining 5 videos by 2023.</li> <li>Spanish subtitles will be added to reach out to Spanish speaking communities in Arizona and also share with partners in Sonora.</li> </ul>	Initial Progress
<b>Objective 2: Identify priority waste streams and develop sustainable materials management and resource efficiency practices that strengthen their respective market value.</b>						
<b>Objective 2a: Identify and measure priority waste streams by 2022</b>						
*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a>						
<b>Objective 2b. Develop strategies or trainings to reduce illegal dumping, maximize material recovery, and promote environmentally sound disposal practices by 2025.</b>						
*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a>						
<b>Objective 3: By 2025, improve knowledge at every level of government (federal, state, local) to improve solid waste disposal site operations</b>						

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

<b>GOAL 3: PROMOTE SUSTAINABLE MATERIALS MANAGEMENT AND WASTE MANAGEMENT, AND CLEAN SITES</b>						
<b>Objective 3a:</b> <i>By 2023, identify strategies to reduce illegal dumping and promote clean sites</i>						
Develop web-based application hosted by Municipality of Nogales, SN for citizens to report trash for trash clean-up prioritization .	Secretariat of Urban Development and Ecology (SDUE) of Municipality of Nogales, Sonora, Commission of Ecology and Sustainable Development (CEDES) North American Development Bank (NADB) USEPA,	Border 2020 Subgrant: \$37,500  Leverage: \$21,645.00	Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Adriana Guerrero (SDUE) <a href="mailto:adriana.guerrero@nogalessonora.gob.mx">adriana.guerrero@nogalessonora.gob.mx</a>  Monica Moran (USEPA) <a href="mailto:moran.monica@epa.gov">moran.monica@epa.gov</a>  André Villaseñor (USEPA) <a href="mailto:Villasenor.andre@epa.gov">Villasenor.andre@epa.gov</a>	<ul style="list-style-type: none"> <li>Develop trash application to identify trash sites and prioritize trash sites in Nogales, Sonora and conduct trash cleanups.</li> <li>Implement trash site cleanups.</li> <li>Community outreach and free collection of e-waste, tires, and furniture.</li> <li>Strengthen enforcement to prevent illegal dumping</li> </ul>	<ul style="list-style-type: none"> <li>Completed clandestine dump inventory by engaging public reporting using WhatsApp notification and used information to complete 33 trash cleanups.</li> <li>Municipality used notifications to verify and map dumping locations to inform enforcement actions to prevent future dumping.</li> <li>Due to the pandemic, presentation on project efforts has been presented at several Task Force and Regional Workgroup Meetings.</li> <li><i>Project completed in December 2021.</i></li> </ul>	Deliverable Achieved
<b>Objective 3b:</b> <i>By 2025, identify strategies to reduce landfill fires.</i>						
* There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a>						
<b>Objective 4: Prevent and Reduce Pollution in the Marine Environment.</b>						
<b>Objective 4a:</b> <i>Promote solutions that involve identifying hotspots of litter accumulation in and around waterways, especially in shared watersheds, and build capacity for improving waste management systems and preventing leakage where necessary.</i>						
*There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a>						
<b>Objective 5: On an annual basis, implement the Binational Consultative Mechanism on sharing information on border area hazardous waste facilities, spent lead acid battery and electronics recycling facilities.</b>						
Implement the binational Consultative Mechanism	Environmental Protection Agency (USEPA), Secretariat of Environment and Natural Resources (SEMARNAT), and Department of Environmental Quality (ADEQ)	USEPA grant: In-kind.	André Villaseñor (USEPA) <a href="mailto:Villasenor.andre@epa.gov">Villasenor.andre@epa.gov</a>  Joaquin Marruffo (ADEQ) <a href="mailto:Marruffo.joaquin@azdeq.gob.mx">Marruffo.joaquin@azdeq.gob.mx</a>  Teodoro Paz (SEMARNAT) <a href="mailto:teodoro.paz@semarnat.gob.mx">teodoro.paz@semarnat.gob.mx</a>	<ul style="list-style-type: none"> <li>Track and report new and established border area hazardous waste facilities (treatment, storage, and disposal), spent lead-acid batteries and electronics recycling facilities</li> <li>Update annually to report with the applicable Consultative Mechanism framework.</li> </ul>	<ul style="list-style-type: none"> <li>On-going binational effort</li> </ul>	Initial progress.

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

GOAL 4: IMPROVE JOINT PREPAREDNESS FOR AND RESPONSE TO HAZARDOUS ENVIRONMENTAL EMERGENCIES						
Objective 1: Update the Joint Mexico-United States Contingency Plan (JCP) and evaluate the emergency notification system along the border of Mexico and the United States						
<i>Objective 1a: In 2021, the JCP notification system should be reviewed and updated to assess its operability and incorporate possible protocol changes and new technological developments</i>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Begin review of JCP for administrative updates	US Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil	Staff time	Jane Kepler (USEPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a>  Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>  Carlos Ortiz, (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>  Gerardo Romo (Douglas Fire) <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a> <u>y</u>  Proteccion Civil, TBD	<ul style="list-style-type: none"> <li>Second review for more substantial changes</li> <li>Review JCP for updates, finalize and jointly sign JCP</li> </ul>	<ul style="list-style-type: none"> <li>Review, update, and finalize US-Mexico Joint Contingency Plan</li> </ul>	Initial Progress
<i>Objective 1b: By the year 2022, a revised and updated version of the JCP will be finalized, including any changes and / or modifications of the participating parties (names, affiliations, etc.) of the governmental structure of both countries</i>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Update and finalize JCP	US Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil,	Staff time	Jane Kepler (USEPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a>  Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>	<ul style="list-style-type: none"> <li>Initial process of reviewing JCP for simple administrative updates</li> </ul>	<ul style="list-style-type: none"> <li>Review, update, and finalize US-Mexico Joint Contingency Plan</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

	AZ-Sonora Task Force Co-Chairs		<p>Carlos Ortiz, (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a></p> <p>Gerardo Romo, Douglas Fire <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a> v</p> <p>Proteccion Civil TBD</p>			
<b>Objective 1c:</b> As part of the evaluation of the operability of the JCP notification system, each country should conduct at least 40 annual chemical emergency notification drills through the National Center of Communication (CENACOM) in Mexico, and the National Response Center (NRC) in the United States						
Conduct emergency notification drills.	US Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil, AZ-Sonora Task Force Co-Chairs	Staff time	<p>Jane Kepler (USEPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a></p> <p>Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a></p> <p>Carlos Ortiz, (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a></p> <p>Proteccion Civil,</p> <p>Gerardo Romo, Douglas Fire <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a> v</p>	<ul style="list-style-type: none"> <li>At least 40 drills completed.</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that the notification system works efficiently.</li> </ul>	Moderate Progress
<b>Objective 2: Review, update and evaluate the Sister City Joint Contingency Plans (SCJCPs).</b>						
<b>Objective 2a:</b> By 2021, a study of the 15 SCJCPs should be completed utilizing existing risk analysis data. This study must consider, among other aspects, the SCJCP's content and scope.						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
ASU Study: Borderwide Study to Evaluate 6 Sister City Joint Contingency	North American Development Bank (NADB), Arizona State University (ASU), US Environmental Protection	Border 2025 Program Subgrant: \$63,224	<p>Jane Kepler (USEPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a></p> <p>Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a></p>	<ul style="list-style-type: none"> <li>Conduct a minimum of two virtual SCJCP evaluation criteria development meetings with Stakeholders</li> <li>Prepare a SCJCP Evaluation Report.</li> </ul>	<ul style="list-style-type: none"> <li>Study will provide the necessary Information to provide a recommended SCJCP template</li> </ul>	Initial Progress



## Arizona-Sonora 2021-2023 Border 2025 Action Plan

Plans	Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil, AZ-Sonora Task Force Co- Chairs		<p style="text-align: center;">Al Brown, (ASU) <a href="mailto:al.brown@asu.edu">al.brown@asu.edu</a></p> <p style="text-align: center;">Carlos Ortiz (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a></p> <p style="text-align: center;">Gerardo Romo, Douglas Fire <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a> v</p> <p style="text-align: center;">Proteccion Civil, TBD</p>			
<p><b>Objective 2b:</b> <i>By the year 2022, a joint study should be carried out in the border region aimed at adjusting the number of Border Sister Cities that are members of the JCP</i></p>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
ASU Study: Borderwide Study to Evaluate 6 Sister City Joint Contingency Plans	North American Development Bank (NADB), Arizona State University (ASU), US Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil, AZ-Sonora Task Force Co-Chairs	Border 2025 Program Subgrant:\$63,224	<p>Jane Kepler (USEPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a></p> <p>Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a></p> <p>Al Brown (ASU) <a href="mailto:al.brown@asu.edu">al.brown@asu.edu</a> Carlos Ortiz, (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a></p> <p>Gerardo Romo (Douglas Fire) <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a> v</p> <p>Proteccion Civil, TBD</p>	<ul style="list-style-type: none"> <li>Conduct a minimum of two virtual SCJPC evaluation criteria development meetings with Stakeholders</li> <li>Prepare a SCJCP Evaluation Report.</li> </ul>	<ul style="list-style-type: none"> <li>Study will provide the necessary Information to provide a recommended SCJCP template</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

<b>Objective 2c:</b> Based on the results of the sister city JCP Study, the updated SCJCP's must be promoted to the corresponding stakeholders (Regional Groups, NADB, etc.) during the Border 2025 Environmental Program. The actions carried out in this objective will be aimed at achieving the update of the 15 SCJCP's between 2020 to 2025						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Prerequisite ASU Study: Borderwide Study to Evaluate 6 Sister City Joint Contingency Plans	North American Development Bank (NADB), Arizona State University (ASU) US Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil AZ-Sonora Task Force Co-Chairs	Border 2025 Program Subgrant:\$63,224	Jane Kepler (USEPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a>  Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>  Al Brown (ASU) <a href="mailto:al.brown@asu.edu">al.brown@asu.edu</a>  Carlos Ortiz, (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>  Gerardo Romo (Douglas Fire) <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a>  Proteccion Civil, TBD	<ul style="list-style-type: none"> <li>Will wait for ASU study to be completed as it is foundational to promoting SCJCP updates</li> </ul>	<ul style="list-style-type: none"> <li>Work in progress</li> </ul>	Initial Progress
<b>Objective 2d:</b> In order to evaluate the SCJCP, each country must conduct at least three annual field drills in the Sister Cities located in the Mexico - United States border region, ensuring a joint response is carried out. Prior to conducting the drills, the participating staff must be trained through the delivery of binational seminars						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
ASU Study: Borderwide Study to Evaluate 6 Sister City Joint Contingency Plans	North American Development Bank (NADB), Arizona State University (ASU), US Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA),	Border 2025 Program Subgrant:\$63,224	Jane Kepler (EPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a>  Bill Jones (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>  Al Brown (ASU) <a href="mailto:al.brown@asu.edu">al.brown@asu.edu</a>	<ul style="list-style-type: none"> <li>Conduct four virtual seminars on SCJCP notification requirements in four Sister City locations.</li> <li>Conduct four virtual SCJCP notification drills in four different Sister City locations.</li> <li>Produce four After Action Reports/Improvement Plans for the notification drills.</li> </ul>	<ul style="list-style-type: none"> <li>Four virtual seminars, four virtual SC Notification drills, and produce after-action reports</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

	Proteccion Civil, AZ-Sonora Task Force Co-Chairs		Carlos Ortiz, (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>  Gerardo Romo (Douglas Fire) <a href="mailto:gerardo.romo@douglasaz.gov">gerardo.romo@douglasaz.gov</a> v;  Proteccion Civil, TBD			
<b>Objective 3: Strengthen the training of emergency response personnel through the development of in-person or online training courses by creating a certificate of skills recognized by corresponding authorities. Additionally, develop and disseminate technical support material to help inform the public in case of emergency.</b>						
<i>Objective 3a: In coordination with the Regions, a Sister City Training Program should be developed during the year 2021 and implemented throughout the Border 2025 program. The Training Program should focus on course offerings that result in certifications to enhance the competency of emergency responders</i>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Utilize trainings to develop list of course offerings that would satisfy the program requirements. Use that list to better inform responders of training needs	Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil, AZ-Sonora Task Force Co-Chairs	Staff time	Bill Jones, (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>  Carlos Ortiz (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>  Proteccion Civil, TBD	<ul style="list-style-type: none"> <li>Deliver a variety of trainings to prepare a well-rounded cadre of responders along the border</li> <li>Determine courses and trainings that could be recommended to improve preparedness</li> </ul>	<ul style="list-style-type: none"> <li>Develop list of approved trainings and certifications</li> <li>Deliver training in Nogales and Aqua Prieta.</li> <li>Produce after action report.</li> </ul>	Initial Progress
<i>Objective 3b: At least three annual seminars, workshops and/or coordinated courses should be conducted between the two countries on topics including chemical substances, risk and consequences analysis, and emergency management.</i>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Determine seminar/workshop needs and deliver at least three	Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental	Staff time	Bill Jones, (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>  Carlos Ortiz (PROFEPA)	<ul style="list-style-type: none"> <li>At meeting held March 16, 2022, both parties agreed to explore coordinated workshops</li> </ul>	<ul style="list-style-type: none"> <li>Determine content and conduct 1st workshop.</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

coordinated courses	Protection (PROFEPA), Proteccion Civil, AZ-Sonora Task Force Co-Chairs		<a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>  Proteccion Civil, TBD			
<b>Objective 3c:</b> <i>In order to complement the training opportunities, audiovisual material and online courses focused on prevention and response to chemical emergencies should be made available at the border.</i>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Develop website and training materials	Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil, AZ-Sonora Task Force Co-Chairs	Staff time	Bill Jones, (USEPA) <a href="mailto:Jones.bill@epa.gov">Jones.bill@epa.gov</a>  Carlos Ortiz (PROFEPA) <a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>  AZ/SON Task Force Co-Chairs, Proteccion Civil, TBD	<ul style="list-style-type: none"> <li>Created online website that can be used for resources at <a href="http://Response.epa.gov">Response.epa.gov</a>.</li> <li>Gather additional training materials to add to website</li> <li>Regularly update website for future training opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Create online web location for course materials and training opportunities (Response.epa.gov)</li> </ul>	Initial Progress
<b>Objective 4: Design and implement the guidelines and protocols to ensure rapid, safe, and legal passage of personnel and materials across the Mexico – United States border in emergency response situations</b>						
<b>Objective 4a:</b> <i>By 2021, an action plan should be developed to address respective liability coverage of each country to facilitate the movement of people and materials across the border during drills or emergency events</i>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Initial consultation with Border Patrol and U.S. Coast Guard (USCG)	Environmental Protection Agency (USEPA), Federal Attorney General's Office for Environmental Protection (PROFEPA), Proteccion Civil,	Staff time	Jane Kepler (EPA) <a href="mailto:Kepler.jane@epa.gov">Kepler.jane@epa.gov</a>  Eugene Lee (EPA) <a href="mailto:Lee.eugene@epa.gov">Lee.eugene@epa.gov</a>  Carlos Ortiz (PROFEPA)	<ul style="list-style-type: none"> <li>Initial outreach to CBP for contact</li> <li>Meet with CBP and other parties to determine feasibility of an MOU for responders.</li> <li>Agreement or MOU with CBP to allow for improved transit across border</li> </ul>	<ul style="list-style-type: none"> <li>Agreement or MOU with CBP to allow for improved transit across border</li> </ul>	Initial Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

	Customs and Border Patrol		<a href="mailto:carlos.ortiz@profepa.gob.mx">carlos.ortiz@profepa.gob.mx</a>			
<p><b>Objective 4b:</b> <i>By 2022, each country should complete a report on the status of transboundary movement of human and material resources during emergencies, as well as the current and future actions that are being carried out</i></p> <p>* There are currently no active projects under this objective for the 2021-2023 cycle. Past action plans are available at: <a href="https://www.epa.gov/border2020/region-9-action-plans">https://www.epa.gov/border2020/region-9-action-plans</a></p>						

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

### GUIDING PRINCIPLES AND CROSS CUTTING MEDIAS

#### *Air quality and asthma actions*

Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
USEPA State Environmental Justice Collaborative Agreement (SEJCA)	Tohono O'odham Nation (TON) Departments: Environmental Protection Office, Natural Resources Department and Solid Waste Regulatory Office  11 Tohono O'odham Nation Districts  TON Elders, TON Youth,  Environmental Protection Agency (US EPA)	USEPA SEJCA 2021 Award: \$199,781	Cornelius Antone (TON) <a href="mailto:cornelius.antone@tonation-nsn.gov">cornelius.antone@tonation-nsn.gov</a>  Alan Bacock (USEPA) <a href="mailto:bacock.alan@epa.gov">bacock.alan@epa.gov</a>	<ul style="list-style-type: none"> <li>Report on the conditions of roads and impact on air quality</li> <li>Development of 11 district/community-based plans to improve air quality</li> <li>15 miles of road repaired and planting of vegetation along 25 miles of roadways</li> <li>Creation and distribution of informational brochures</li> <li>Bi-monthly meetings in each of the 11 districts.</li> </ul>	<ul style="list-style-type: none"> <li>Identification and prioritization of roads that will be upgraded and vegetation planting locations.</li> <li>100% of the districts will implement their air quality plans</li> <li>Commitment by leadership for road repairs and environmental improvements</li> <li>Increase in the number of community members aware of air quality issues and commitment to act.</li> <li>Youth volunteer team identified working on monitoring for studying air quality and supporting plans for air quality improvements through a cultural lens</li> </ul>	Initial Progress

#### *Integrated pest management (IPM) and pesticide exposure actions*

Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Pest related pollution prevention & emergency preparedness through integrated pest management (IPM) education and tribal partnerships in	University of Arizona; Inter Tribal Council of Arizona, Inc. (ITCA); Tohono O'odham Nation; Cocopah Tribe; Pascua Yaqui Tribe; Arizona Department of Health Services; HUD - StopPests in Housing; Regional	USEPA, NADB Border 2020 Subgrant: \$99,974  Leverage: \$46,001	Jorge Hernandez (NADB) <a href="mailto:jhernandez@nadb.org">jhernandez@nadb.org</a>  Shujuan (Lucy) Li (UA) <a href="mailto:LiSj@cals.arizona.edu">LiSj@cals.arizona.edu</a>  Jessica Helgesen (USEPA) <a href="mailto:Helgesen.jessica@epa.gov">Helgesen.jessica@epa.gov</a>	<ul style="list-style-type: none"> <li>Form three advisory committees.</li> <li>Implement three environmental health workshops based on Tribe's priorities.</li> <li>Deliver three trainings (one per Tribe) to enhance pest related emergency preparedness including disease vectors like brown dog ticks and mosquitoes.</li> <li>ITCA's will assist tribes with</li> </ul>	<ul style="list-style-type: none"> <li>Led three virtual meetings to develop three advisory committees.</li> <li>Developed and deployed one knowledge, attitude, and practices survey on assessing pest issues, mosquitoes, ticks, pesticides. Tribal participants noted an 80% increase in knowledge of pests and IPM.</li> <li>Conducted 6 onsite field visits with partner tribes on mobile rabies clinic and neighborhood trash clean ups.</li> </ul>	Deliverable Achieved

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

<p>Arizona</p>	<p>Center for Border Health, Inc; Indian Health Services; Tribal Health Department,</p>			<p>planning, preparing, &amp; responding to emergencies involving public health, hazardous materials, &amp; other hazards.</p> <ul style="list-style-type: none"> <li>• Three publications + other environmental health resources as the Natural Enemies Field Guide will be translated into Spanish.</li> </ul>	<ul style="list-style-type: none"> <li>•Treated 2,000+ dogs with rabies vaccination and inspected 1,100+ dogs for brown dog ticks-some installed tick collars.</li> <li>•Delivered 11 presentations to tribal communities, reaching 539 participants.</li> <li>•Contributed to or created IPM 10 videos (659 views) and 10 online presentations available online (835 views).</li> <li>• Organized 8 workshops/outreach for 483 tribal participants with partner tribes.</li> <li>• Facilitated 9 virtual trainings with EPA, including 189 AZ attendees.</li> <li>• Delivered 21 continuing education units in 13 meetings/courses for 514 pesticide applicators, some of whom serve tribes.</li> <li>• 52 publications distributed to our partner tribes and tribal members: 11 public service announcements, 3 social media postings, and 38 Extension publications such as brochures, trifold, infographic fact sheets, 2-page IPM shorts, monthly newsletters, etc.</li> <li>Included 2 IPM newsletters on how to disinfect COVID-19 and facemask safety.</li> <li>•Translated the Natural Enemies Field Guide into Spanish.</li> <li>• Presented at the Region 9 USEPA Tribal Conference in October 2021 with USEPA <a href="https://acis.cals.arizona.edu/community-ipm/public-health-ipm/epa-border-2020">https://acis.cals.arizona.edu/community-ipm/public-health-ipm/epa-border-2020</a></li> </ul>	
<p>Environmental Health Capacity Grant Component A</p>	<p>Arizona Department of Human Health Services (ADHS), Centers for Disease Control and Prevention (CDC), Arizona Department of Occupational Safety, Poison Control Centers, Arizona Department of Agriculture AHCCCS,</p>	<p>CDC: Funding Applies Statewide, \$40k</p>	<p>Niki Lajevardi-Khosh (ADHS) <a href="mailto:niki.lajevardi-khosh@azdhs.gov">niki.lajevardi-khosh@azdhs.gov</a></p>	<ul style="list-style-type: none"> <li>• Establish state-based pesticide surveillance program; improve and enhance pesticide illness prevention strategies</li> <li>• Implement 5-year CDC grant to improve pesticide and adult blood lead poisoning surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• Reviewing pesticide surveillance protocols, working with Poison Control to ensure data entry.</li> <li>• Exploring data to identify target populations and intervention strategies</li> </ul>	<p>Moderate Progress</p>

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

	Health care Providers					
Environmental Health Capacity Grant Component B	Arizona Department of Health Service (ADHS), CDC Department of Health Services Laboratory, University of Arizona Cooperative Extension Offices	CDC for lead poisoning prevention: Grant funding for statewide efforts for lead poisoning prevention; in-kind from state laboratory and other ADHS program support	Niki Lajevardi-Khosh (ADHS) <a href="mailto:khosh@azdhs.gov">khosh@azdhs.gov</a>	<ul style="list-style-type: none"> <li>Test private well water samples from all Arizona Counties by end of 2025</li> </ul>	<ul style="list-style-type: none"> <li>Completed around 300 tests of private well owners in the first year</li> <li>Border Region Counties tested include so far: Cochise and Yuma.</li> </ul>	Moderate Progress
<b><i>Multi-topic environmental health actions (IPM, IAQ, vector-borne, asthma-related, lead poisoning, children's health, Healthy Homes, etc.)</i></b>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2021-2023	Status
Cochise County, AZ Brownfields Assessment grant	Environmental Protection Agency (USEPA), Cochise County, Development Services Department	USEPA Grant: \$600,000	Scott Stollman (USEPA) <a href="mailto:Stollman.scott@epa.gov">Stollman.scott@epa.gov</a>	<ul style="list-style-type: none"> <li>Efforts to revitalize vacant and underused properties in the County.</li> <li>Program to support County, municipal and community member committee through implementation of environmental assessment</li> <li>Conduct environmental assessments – Phase 1 and 2 for Brownfield sites throughout Cochise County.</li> <li>Develop reuse plans to redevelop brownfields properties.</li> </ul>	<ul style="list-style-type: none"> <li>Site inventory was established and grantee and partners assessed high priority properties.</li> <li>All Phase I and Phase II Environmental Assessments and Reuse Plans completed. Several properties, as a result of the assessment work done under the EPA Brownfields grant, were sold for redevelopment.</li> <li>Grantee has applied for a second grant, which is currently being evaluated.</li> <li>EPA staff addressing other needs to see if land revitalization technical assistance for the City of Douglas is appropriate.</li> </ul>	Significant Progress
Tribal response program grant	Environmental Protection Agency (USEPA),	USEPA 128a grant	Jose Garcia (USEPA) <a href="mailto:Garcia.jose@epa.gov">Garcia.jose@epa.gov</a>	<ul style="list-style-type: none"> <li>Maintain emergency response and Brownfields training for capacity building.</li> </ul>	<ul style="list-style-type: none"> <li>Progress has been slowed due to COVID-19 and internal staff challenges.</li> <li>The Nation is receiving technical</li> </ul>	Moderate Progress



## Arizona-Sonora 2021-2023 Border 2025 Action Plan

	Tohono O’odham Tribal Nation			<ul style="list-style-type: none"> <li>• Provide technical assistance on environmentally compromised property.</li> </ul>	assistance to assess an environmentally compromised property that the Nation is considering acquiring	
Town of Ajo Land revitalization technical assistance	USEPA, State of Arizona, Pima County	TBD	<p>Jose Garcia (USEPA) <a href="mailto:Garcia.jose@epa.gov">Garcia.jose@epa.gov</a></p> <p>Scott Stollman (USEPA) <a href="mailto:Stollman.scott@epa.gov">Stollman.scott@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• USEPA initiating efforts to work with the State and the County to share details of our technical assistance to see if their interested in any of the resources.</li> </ul>	<ul style="list-style-type: none"> <li>• Progress to be assessed</li> </ul>	Initial Progress
City of Yuma Brownfields assessment grant	USEPA, City of Yuma	USEPA Brownsfield Grants \$400,000	<p>Scott Stollman (USEPA) <a href="mailto:Stollman.scott@epa.gov">Stollman.scott@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• City of Yuma selected for a brownfields assessment grants in 2021 in the amount of \$600,000.</li> <li>• Grant funds will be used to conduct approximately twelve Phase I and eight Phase II environmental site assessments.</li> <li>• Grant funds will also be used to inventory sites and support cleanup planning, area-wide planning, and community outreach activities.</li> <li>• Grant efforts will focus on assessing various properties near the anticipated site of their future multiversity [three universities (ASU, UA, and NAU) sharing one location.</li> </ul>	<ul style="list-style-type: none"> <li>• On-going effort in coordination with City of Yuma representatives</li> </ul>	Initial Progress
Implement lead poisoning prevention program targeting physicians to increase screening rates of children in Arizona	Arizona Department of Health Service (ADHS) CDC, AHCCCS, Health care Providers	CDC for lead poisoning prevention: Grant funding for statewide efforts for lead poisoning prevention	<p>Ginny De La Cruz, (ADHS) <a href="mailto:ginny.delacruz@azdhs.gov">ginny.delacruz@azdhs.gov</a></p>	<ul style="list-style-type: none"> <li>• Increase lead screenings of at-risk children at 12 and 24 months of age.</li> <li>• Increase identification of lead poisoning source for families of children with elevated blood lead levels.</li> <li>• Finalize 2020 Annual Surveillance Report.</li> <li>• Improve use of surveillance system data to capture missing data on child demographic and</li> </ul>	<ul style="list-style-type: none"> <li>• New Educational video for families on childhood lead poisoning was developed and is available in both English and Spanish: English: <a href="https://youtu.be/jG8EBggKZHE">https://youtu.be/jG8EBggKZHE</a> Spanish: <a href="https://youtu.be/VBUWQ8maKtw">https://youtu.be/VBUWQ8maKtw</a></li> <li>• 2020 Surveillance report will be publish in April of 2022 AZ was a recipient of the WIN Grant and is continuing to test water samples in Charter Schools across the state.</li> <li>• Program is working to develop culturally appropriate materials for recently arrived</li> </ul>	Significant Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

				<p>follow-up information</p> <p>* Decrease disparities in blood lead levels by race/ethnicity and socioeconomic status</p>	<p>refugees who have children with elevated blood lead levels.</p>	
<p>City of South Tucson Brownfields Assessment Grant</p>	<p>Environmental Protection Agency (USEPA), South Tucson</p>	<p>USEPA Brownsfield grant \$300,000</p>	<p>Scott Stollman (USEPA) <a href="mailto:Stollman.scott@epa.gov">Stollman.scott@epa.gov</a></p> <p>Jose Garcia (EPA) <a href="mailto:Garcia.jose@epa.gov">Garcia.jose@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• Community-wide grant funds will be used to conduct 13 Phases I and six Phase II environmental site assessments.</li> <li>• Grant funds also will be used to develop three cleanup plans and a comprehensive brownfields redevelopment plan, and support community outreach activities.</li> <li>• Assessment activities will focus on the city's Central Business District and the Fourth Avenue and Sixth Avenue business corridors, which have Qualified Opportunity Zones.</li> <li>• Priority sites include a 0.6-acre apartment and trailer complex and a 10.4-acre vacant dog racing track</li> </ul>	<ul style="list-style-type: none"> <li>• Efforts for this project has been delayed due staff changes.</li> </ul>	<p>Moderate Progress</p>
<p>Implement SunWise School Program in Arizona Public Schools for grades K-8 to teach sun safety using USEPA SunWise curriculum</p>	<p>Arizona Department of Health Service (ADHS), CDC</p>	<p>CDC block grant, Prevention and Public Health Fund: Funding Applies Statewide</p> <p>sea</p>	<p>Sergio O. Perez (ADHS) <a href="mailto:Sergio.Perez@azdhs.gov">Sergio.Perez@azdhs.gov</a></p>	<ul style="list-style-type: none"> <li>• USEPA SunWise curriculum materials are promoted and distributed in schools.</li> <li>• School Presentations offered to schools.</li> <li>• The program also distributes and promotes sun safety information through its annual sun safety poster contest, which reaches students in Arizona (AZ)</li> <li>• AZ Border Counties: Boosting educational assistance via materials and assembly requests.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to COVID-19, there were no in person events in 2020, instead virtual presentations were advertised.</li> <li>• The program held a virtual sun safety webinar on May 7,2020 through the Healthy Arizona Worksites Program which was promoted throughout the state and targeted outdoor workers.</li> <li>• Due to the lack of outreach opportunities this year, the program instead focused on developing an online video on skin cancer prevention and developing a teacher's guidebook to distribute to schools.</li> </ul>	<p>Moderate Progress</p>

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

<p>Implement an Extreme Weather and Public Health Program to develop a climate and health adaptation plan in response to extreme weather and climate-sensitive public health hazards</p>	<p>ADHS, CDC, University of Arizona Cooperative Extension</p>	<p>CDC Building Resilience Against Climate Effects (BRACE): Funding Applies Statewide: \$400k Annually (2021--2026)</p>	<p>Hsini Lin (ADHS) <a href="mailto:Hsini.Lin@azdhs.gov">Hsini.Lin@azdhs.gov</a></p>	<ul style="list-style-type: none"> <li>• Maintain and enhance website with resources for partners which includes safety information on extreme weather and reports such as the Arizona Climate and Health Adaptation Plan, Vulnerability Assessment Report.</li> <li>• Engage stakeholders and work to raise climate as a priority throughout the state with plans to expand efforts to more counties</li> <li>• Fund 2 County Health Department (2 largest county populations: Maricopa and Pima) in partnership with Arizona State University and University of Arizona for two projects: evaluation of cooling centers to protect heat vulnerable populations and second is to develop new county climate and health strategic plans</li> </ul>	<ul style="list-style-type: none"> <li>• Maintained Extreme Weather Website: <a href="https://www.azdhs.gov/search/index.php?q=https%3A%2F%2Fazdhs.gov%2Fpreparedness%2F%20epidemiology-disease-control%2Fextremeweather%2Findex.php%20%20with%20climate%20">https://www.azdhs.gov/search/index.php?q=https%3A%2F%2Fazdhs.gov%2Fpreparedness%2F%20epidemiology-disease-control%2Fextremeweather%2Findex.php%20%20with%20climate%20</a> with climate and health reports to inform public on health-related actions.</li> <li>• Extreme Weather page -maintained heat, cold and wildlife safety topics. New surveillance report which covers border counties released for 2019 data.</li> <li>• Three Counties Issued Funding in 2020 (Maricopa, Pinal, and Yuma) and Two Counties Issued Funding for 2021 (Maricopa and Yuma). Pima and Pinal had to withdraw due to COVID-19 priorities.</li> <li>• Facilitated 2020 State Heat Season Recap Webinar in Place of State Heat Preparedness Workshop (125 participants) Virtual meeting needed due to COVID-19</li> <li>• Aided in developing and publishing cooling center maps with Yuma County Public Health for 2020</li> </ul>	<p>Moderate Progress</p>
<p>Implement private well owner drinking water and health education program</p>	<p>ADHS, CDC, University of Arizona Cooperative Extension</p>	<p>CDC Safe Water for Community Health Cooperative Agreement: Funding Applies Statewide \$130k Annually (2015-2020)</p>	<p>Niki Lajevardi-Khosh (ADHS) <a href="mailto:niki.lajevardi-khosh@azdhs.gov">niki.lajevardi-khosh@azdhs.gov</a></p>	<ul style="list-style-type: none"> <li>• 6 Workshops throughout AZ planned to be held between October 2019-September 2020</li> </ul>	<ul style="list-style-type: none"> <li>• Moved in-person workshops to virtual workshops in 2020 due to COVID-19. All 6 planned were completed.</li> <li>• Grant funding extended through no-cost extension through 2021 to finish tasks delayed due to COVID-19. Extended time period will be used to provide free well water tests to 400 residents before September 2021. Future testing will be carried on by the CDC Environmental Health Capacity grant.</li> <li>• Grant completed - Project completed its grant cycle and is funded under a new grant (EHCB)</li> </ul>	<p>Deliverable Achieved</p>

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

Implement an Environmental Public Health Tracking Program to provide accessible environmental and health data for aiding public health actions	ADHS, CDC, AZ County Health and other State Departments, Local universities (Arizona State University, University of Arizona, and Northern Arizona University), ADEQ	CDC Environmental Public Health Tracking Cooperative Agreement: Funding Applies Statewide \$607k Annually (2017-2022)	Niki Lajevardi-Khosh (ADHS) <a href="mailto:niki.lajevardi-khosh@azdhs.gov">niki.lajevardi-khosh@azdhs.gov</a>	<ul style="list-style-type: none"> <li>ADHS maintains program website: Arizona Environmental Public Health Tracking (EPHT) website: <a href="https://azdhs.gov/preparedness/epidemiology-disease-control/environmental-health/environmental-public-health-tracking/index.php">https://azdhs.gov/preparedness/epidemiology-disease-control/environmental-health/environmental-public-health-tracking/index.php</a></li> <li>Website viewers can learn about environmental hazards in the state that could impact health using the sites interactive tool. such a looking at air quality with respiratory issues such as asthma.</li> <li>The website features additional Arizona specific data not available on CDC's Tracking Portal. Data can also be downloaded, shared, and printed. ADHS will be working with CDC and partners within the state to expand the data available and add new features to the website.</li> </ul>	<ul style="list-style-type: none"> <li>Maintained and expanded an interactive tool with environmental health data that can be viewed as maps, charts, and graphs</li> <li>Published additional years of data: 1) emergency department and hospitalization inpatient admission data on chronic obstructive pulmonary disease (COPD), carbon monoxide poisoning, and asthma (2005-2019); 2) sub-county level data on asthma and COPD ED visits and hospitalizations (2010-2021)</li> </ul>	Moderate Progress
<b><i>Lead poisoning prevention actions</i></b>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2022-2023	Status
Held Annual Arizona Sanitarians' Conference to provide continuing education to Registered Sanitarians	ADHS, AZ County Health Departments, Indian Health Service, Arizona Environmental Health Association (AZEHA), National Environmental Health	State Funds	Heather Miller (ADHS), <a href="mailto:Heather.Miller@azdhs.gov">Heather.Miller@azdhs.gov</a>	Provided 14 continuing education hours in two-day educational conference.	<ul style="list-style-type: none"> <li>2021 Conference conducted virtually, via Zoom platform. 240 attendees registered statewide, including those from Cochise, Pima, Santa Cruz, and Yuma Counties. Presentations were later provided on ADHS website.</li> </ul>	Deliverable Achieved

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

statewide	Association (NEHA)					
COVID-19 response assistance provided to facilities and general public	Arizona Department of Health Service (ADHS)	State Funds	Heather Miller (ADHS) <a href="mailto:Heather.Miller@azdhs.gov">Heather.Miller@azdhs.gov</a>	<ul style="list-style-type: none"> <li>• Covid safety requirements implemented for public facilities such as restaurants, bars, and nightclubs. On site assistance provided when necessary, including at the Arizona State Prison Complex-Yuma.</li> </ul>	<ul style="list-style-type: none"> <li>• On-site assistance has slowed, but COVID guidance and sanitation resources are sent to facilities with every inspection report.</li> </ul>	Significant Progress
Inspections conducted in Border Counties	Arizona Department of Health Service (ADHS)	State Funds	Heather Miller(ADHS) <a href="mailto:Heather.Miller@azdhs.gov">Heather.Miller@azdhs.gov</a>	<ul style="list-style-type: none"> <li>• Food Safety inspections conducted at prisons statewide, behavioral health facilities in Pima, Santa Cruz, and Yuma Counties, and produce warehouses in Santa Cruz County.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensured cleanliness and safe food handling procedures in licensed facilities in Border Counties (as well as statewide). On-going yearly inspections.</li> </ul>	Significant Progress
<b><i>Cross Media Efforts for Border 2025 Outreach</i></b>						
Description of Action	Collaborating Organizations	Cost and Source	Lead Points of Contact	Target Outputs	Expected Results in 2022-2023	Status
Expand knowledge on Border 2025 and increase Environmental Health Awareness along US/MX Border in the Arizona- Sonora Border region	USEPA -Tribal Intergovernmental and Policy Division	USEPA (Staff time )	Jessica Helgesen (USEPA) <a href="mailto:Helgesen.jessica@epa.gov">Helgesen.jessica@epa.gov</a>  Lorena Lopez-Powers (USEPA) <a href="mailto:Lopezpowers.lorena@epa.gov">Lopezpowers.lorena@epa.gov</a>	<ul style="list-style-type: none"> <li>• Conduct Outreach to communities on environmental health through Border 2025</li> <li>• Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>• On 5/19/21 presented on Environmental Health, Environmental Justice, Border 2020/5 in Spanish at the Binational Health Council Ambos Nogales-COBINAS (~20 people)</li> <li>• 1st University of Arizona- CIAD Binational workshop for Vector borne and zoonotic disease research. EPA shared information</li> </ul>	Moderate Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

USEPA					<p>on potential funding opportunities and identified priorities. Priorities include pesticide resistance, climate change impacts and vulnerability/social determinates of health related to vector borne and zoonotic diseases. Reached over 70 participants.</p> <ul style="list-style-type: none"> <li>• April 2022-Provided Border 2025 information to Ambos Nogales COBINA meeting and included link on upcoming program meetings</li> </ul>	
Regional Work Group Planning Sessions	USEPA -Tribal Intergovernmental and Policy Division	Staff time	<p>Lorena Lopez-Powers (USEPA) <a href="mailto:Lopezpowers.lorena@epa.gov">Lopezpowers.lorena@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• Organize regional workgroup meetings with Program partners to discuss goals and objectives of border program</li> <li>• Discussion to include regional priorities and on-the-ground efforts to advance environmental benefits to border communities</li> </ul>	<ul style="list-style-type: none"> <li>• February 2021- Held session with Arizona/Sonora state and tribal representatives to close out Border 2020 and introduce new border program director</li> <li>• June 2021- Hosted binational session to discuss regional priorities which included Tribal representatives of Tohono O'dham, Cocopah Tribe, Pascua Yaqui, and Fort Yuma Quechan Indian Tribe</li> </ul>	Moderate Progress
USEPA Regional Operations Tribal Committee (R9)– Border Work Group	Border Workgroup, Region 9 RTOC	Staff time	<p>Emily Pimentel (USEPA) <a href="mailto:Pimentel.emily@epa.gov">Pimentel.emily@epa.gov</a></p> <p>Camilo Perez (USEPA) <a href="mailto:Pesticidesofficer@quechantribe.com">Pesticidesofficer@quechantribe.com</a></p>	<ul style="list-style-type: none"> <li>• Convene Border Workgroup.</li> <li>• Plan topics to meet quarterly at the RTOC meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Included topics in discussion/presentations: Climate Change, Solid waste, and impacts of US-Mexico border wall</li> </ul>	Moderate Progress
Policy Workgroup Sessions and National Coordinators Meeting	USEPA -Tribal Intergovernmental and Policy Division and Division	Staff time	<p>Melissa Dimas (USEPA) <a href="mailto:Dimas.melissa@epa.gov">Dimas.melissa@epa.gov</a></p> <p>Jessica Helgesen (USEPA) <a href="mailto:Helgesen.jessica@epa.gov">Helgesen.jessica@epa.gov</a></p> <p>Lorena Lopez-Powers (USEPA) <a href="mailto:Lopezpowers.lorena@epa.gov">Lopezpowers.lorena@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• Coordination with Policy Workgroup representatives to discuss Border Program's Goals and Objectives</li> <li>• Efforts to include public meetings that address regional priorities in the Arizona/Sonora region.</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of four public meetings to discuss regional priorities for each goal and upcoming meeting of National Coordinators</li> <li>• Borderwide public sessions were held for air, water, waste, and emergency preparedness for response.</li> </ul>	Significant Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

Climate Change Training for Tribes	Inter-tribal Environmental Professionals (ITEP) at Northern Arizona University	Staff Time	Emily Pimentel (USEPA) <a href="mailto:Pimentel.emily@epa.gov">Pimentel.emily@epa.gov</a>	<ul style="list-style-type: none"> <li>• Hold a US-Mexico Border Region Climate Action Workshop</li> </ul>	<ul style="list-style-type: none"> <li>• Two-day climate change workshop held March 22-23, 2022.</li> </ul>	Significant Progress
Expand Participation with Tribal community representatives in Border 2025	Environmental Protection Agency (USEPA)	Staff time	Emily Pimentel (USEPA) <a href="mailto:Pimentel.emily@epa.gov">Pimentel.emily@epa.gov</a>  Lorena Lopez-Powers (USEPA) <a href="mailto:Lopez-powers.lorena@epa.gov">Lopez-powers.lorena@epa.gov</a>	<ul style="list-style-type: none"> <li>• Conduct Outreach to communities on environmental health and climate change through Border 2025</li> <li>• Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>• Organized and coordinated 3 meetings for Regional Tribal Operations Committee(RTOC) in 2021</li> <li>• Topics included: Update on border and ideas to improve engagement and benefit of Border program among tribes Border Program, Development of new Tribal Workgroup Regional Coordinators</li> <li>• March 2022- In coordination with ITEP, EPA hosted a Climate Change Adaptation Workshop for Tribal communities.</li> </ul>	Moderate Progress
Border 2025 Bilingual Newsletters	USEPA -Tribal Intergovernmental and Policy Division	Staff time	Jessica Helgesen (USEPA) <a href="mailto:Helgesen.jessica@epa.gov">Helgesen.jessica@epa.gov</a>	<ul style="list-style-type: none"> <li>• Share quarterly newsletters with border region on Border 2025 updates in Region 9.</li> </ul>	<p>January 2022</p> <ul style="list-style-type: none"> <li>• <a href="https://www.epa.gov/usmexicoborder/us-mexico-border-2025-january-2022-newsletter">https://www.epa.gov/usmexicoborder/us-mexico-border-2025-january-2022-newsletter</a></li> <li>• <a href="https://www.epa.gov/usmexicoborder/frontera-2025-mexico-estados-unidos-boletin-de-enero-de-2022">https://www.epa.gov/usmexicoborder/frontera-2025-mexico-estados-unidos-boletin-de-enero-de-2022</a></li> </ul> <p>October 2021</p> <ul style="list-style-type: none"> <li>• <a href="https://www.epa.gov/usmexicoborder/us-mexico-border-2025-october-2021-newsletter">https://www.epa.gov/usmexicoborder/us-mexico-border-2025-october-2021-newsletter</a></li> <li>• <a href="https://www.epa.gov/usmexicoborder/frontera-2025-mexico-estados-unidos-boletin-de-octubre-2021">https://www.epa.gov/usmexicoborder/frontera-2025-mexico-estados-unidos-boletin-de-octubre-2021</a></li> </ul> <p>July 2021</p> <ul style="list-style-type: none"> <li>• <a href="https://www.epa.gov/usmexicoborder/us-mexico-border-2025-july-2021-newsletter-mexico-eeuu-frontera-2025-boletin-de">https://www.epa.gov/usmexicoborder/us-mexico-border-2025-july-2021-newsletter-mexico-eeuu-frontera-2025-boletin-de</a></li> </ul> <p>March 2021</p> <ul style="list-style-type: none"> <li>• <a href="https://www.epa.gov/usmexicoborder/us-mexico-border-2020-march-2021-newsletter-mexico-eeuu-frontera-2020-boletin-de">https://www.epa.gov/usmexicoborder/us-mexico-border-2020-march-2021-newsletter-mexico-eeuu-frontera-2020-boletin-de</a></li> </ul>	Significant Progress

## Arizona-Sonora 2021-2023 Border 2025 Action Plan

Forum for Non-government Organizations in US-Mexico border communities of Arizona-Sonora and California-Baja California	USEPA -Tribal Intergovernmental and Policy Division and Division and North American Development Bank	Staff Time and NADB interpretation/meeting support	<p>Emily Pimentel (USEPA) <a href="mailto:Pimentel.emily@epa.gov">Pimentel.emily@epa.gov</a></p> <p>Jessica Helgesen (USEPA) <a href="mailto:Helgesen.jessica@epa.gov">Helgesen.jessica@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• Forum to improve outreach on border program and leverage NGOs</li> <li>• Communicate Border 2025 program priorities</li> </ul>	<ul style="list-style-type: none"> <li>• Hosted binational session in May 2021</li> <li>• Engaged over 40 participants from border communities</li> <li>• Consideration of future forum on emerging environmental issues</li> </ul>	Deliverable Achieved
Expand knowledge on Border 2025 and specific program Guiding Principles	USEPA -Tribal Intergovernmental and Policy Division	Staff time	<p>Jessica Helgesen (USEPA) <a href="mailto:Helgesen.jessica@epa.gov">Helgesen.jessica@epa.gov</a></p> <p>Lorena Lopez-Powers (USEPA) <a href="mailto:Lopezpowers.lorena@epa.gov">Lopezpowers.lorena@epa.gov</a></p>	<ul style="list-style-type: none"> <li>• In coordination with EPA staff and Task Forces' leads conduct outreach to communities to share information on border program through meetings, webinars, or other public outreach sessions in the Arizona- Sonora border region.</li> <li>• On-going effort</li> </ul>	<p><b>2021 Public Meetings</b></p> <ul style="list-style-type: none"> <li>• October/November: Air and Water task force meetings: Introduced Border 2025 Program, provided general updates on regional projects and encourage future participation for new group (task forces under the Border 2025 Program).</li> </ul> <p><b>2022 Public Meetings</b></p> <ul style="list-style-type: none"> <li>• February: Arizona – Sonora Air Quality task force meeting included discussion on general priorities, updates on projects.</li> <li>• March: Goals 1, 2, 3, &amp; 4: Air, Water, Waste and Emergency Preparedness and Response Policy Workgroups Public Meetings. Discussed border program, border-wide priorities from program partners that included states and tribal representatives</li> </ul> <p><b>For Border 2025 events</b></p> <ul style="list-style-type: none"> <li>• Sign-up to receive future program related information with our listserv – see <a href="#">link</a>.</li> <li>• <a href="#">Facebook</a> and EPA Region 9 <a href="#">Twitter</a></li> <li>• Posted information our <a href="#">Border 2025 calendar</a>.</li> </ul>	Significant Progress