



Border 2025: US-Mexico Environmental Program

2021-2023 Action Plan Summary

October 2022

The purpose of this brief summary is to highlight a number of actions taking place in the Arizona/Sonora region. In early 2022, EPA and its AZ-SN state partners completed the [2021-23 Action Plan](#) document. Its main objective is to track, assess, and report progress towards achieving Border 2025 Goals and Objectives. The Action Plan includes program commitments, timeframes and outputs for activities undertaken by United States Environmental Protection Agency (U.S.EPA) and Program partners working to improve environmental conditions in border and tribal communities of the Arizona-Sonora region.

Currently, the Arizona/Sonora Action Plan contains 40 initiatives, some of which have been completed or are in first stages of implementation.

GOAL 1 – REDUCE AIR POLLUTION

- Install and operate NO_y and CO Monitors in San Luis Rio Colorado, Sonora (SLRC). The Arizona Department of Environmental Quality (ADEQ) will collect NO_y and CO data to complement the O₃ data currently being collected at SLRC. Such information will be shared with the municipality of San Luis Río Colorado, Sonora to update the air quality diagnostics.
- In February 2022, EPA completed the “Summary of Methodologies for Mexico and U.S. National Emissions Inventories” and it was shared with our state partners. This effort encourages communication about methodologies used to develop existing emissions inventories and better understand such releases in the border region. Study will also facilitate efforts to harmonize the content and development of future releases of U.S. and Mexico national emission inventories.
- The Commission of Ecology and Sustainable Development (CEDES) will work to raise awareness among the populations of the state of Sonora, including border municipalities, on effects to human health on exposure of air pollutants generated by burning of agricultural and solid waste.

Goal 2 – IMPROVE WATER QUALITY

- The Cocopah Indian Tribe is working to develop a wastewater reuse design to benefit Cocopah Tribal Lands. The project will assess the water quality of City of Yuma’s treated wastewater and develop a design to discharge wastewater into the Colorado River that runs through the tribal community leading to reuse as part of a riparian/wetland restoration. Efforts support Cocopah’s plan to better adapt to climate change and this effort will complement other on-going environmental efforts.

- To better serve the community of Nogales, Sonora and improve the binational tributaries in the Ambos Nogales region an effort to expand Los Alisos Wastewater Treatment Plant’s Module 3 from 5 to 10 mgd has been initiated and awaiting certification by the North American Bank (NADB) sometime in the near future.
- The municipality of Nogales, Sonora, and several partners such as the Arizona Department of Environment Quality (ADEQ) are implementing the *Wastewater Pretreatment of Heavy Metals and Reuse at Nogales, Sonora project*. This effort is working to reduce or eliminate heavy metals that harmfully impact the operations at the Nogales International Wastewater Treatment Plant (NIWTP) in Rio Rico, Arizona, and the quality of the effluent the plant discharges into the Santa Cruz River. This effort also aims to reuse treated wastewater for green infrastructure purposes such as irrigation of green areas, construction, and /or toilet flushing.
- Through the support of the Border 2025 Program, Borderlands Restoration Network is implementing binational trainings for sediment pollution retention in Sonora and Arizona border region. The project works to improve best management practices for watershed sediment pollution retention in the region by implementing three workshops to demonstrate appropriate ecological restoration approaches. Efforts also include the construction of 50 erosion control structures that reduce sediment transport and re-establish native vegetation communities. Two workshops and the construction of structures have been implemented.

GOAL 3 – PROMOTE SUSTAINABLE MATERIALS MANAGEMENT AND WASTE MANAGEMENT, AND CLEAN SITES

- The Arizona Department of Environmental Quality in coordination with the U.S. Department of Agriculture (USDA) is using a cost-benefit analysis model to design up to two regional centralized processing centers in surrounding Arizona communities. The community of Bisbee serves as a model for processing centers that serve as “hubs” to encourage smaller communities, or “spokes”, to deliver their recyclables to these hubs.
- Through the [*Consultative Mechanism*](#), Border 2025 Program partners track and annually report new and established border area hazardous waste facilities (treatment, storage, and disposal), spent lead-acid batteries and electronics recycling facilities within 100 km of the US-Mexico border. We completed the most recent annual update in winter 2021.
- ADEQ has produced and uploaded eight videos to YouTube on how the public can reduce, reuse and recycle. Dubbed ‘The Biggest Reducer’, each Spanish-subtitled, 2-minute clip focuses on sustainably managing a given household or restaurant material, like napkins, single-use containers and aluminum. Up next are videos on gift wrapping and clothing & textiles.

GOAL 4 – IMPROVE JOINT PREPAREDNESS FOR AND RESPONSE TO HAZARDOUS ENVIRONMENTAL EMERGENCIES

- Staff at Arizona State University (ASU), a Border 2025 grantee, is working to review and evaluate the existing Sister City Joint Contingency Plans (SCJCPs) for the Arizona/Sonora region. Through the creation of binational committee representing the communities, ASU staff are working to conduct a minimum of two virtual SCJCP evaluation criteria development meetings with key stakeholders and prepare a SCJCP *Evaluation Report* that will lead to the creation of a future template border communities can use to update future sister-city plans accordingly.
- *Goal 4-Objective 3a* of Border 2025 emphasis the need to implement training program opportunities to focus on course offerings that result in certifications to enhance the competency of emergency responders. This effort is currently developing a list of approved trainings and certifications specifically for the Cities of Nogales and Agua Prieta, Sonora.
- Implementing an effort for an initial consultation with Border Patrol (CBP) and U.S. Coast Guard (USCG) and other parties to determine feasibility of an MOU (Memorandum of Understanding) for responders to allow for improved transit across border to facilitate the movement of people and materials across during drills or emergency events take place in sister-city communities.

FUNDAMENTAL STRATEGY: Environmental Health and Environmental Justice

- Through a USEPA State Environmental Justice Cooperative Agreement (SEJCA) the tribal community of Tohono O’odham Nation (TON) is working to improve air quality in the tribal community by reporting on the conditions of roads and their impact on air quality. TON’s development of 11 district/community-based air plans will also work to improve air quality. They have also committed to plant vegetation along 15 miles of roadways. Such efforts will include a youth volunteer team that will work on the monitoring and study of air quality that will support plans for air quality improvements through a cultural lens.
- There are on-going efforts to expand knowledge on Border 2025 and increase Environmental Health Awareness along the Arizona-Sonora Border region. Efforts have included presentations on Environmental Health and Environmental Justice (May 2021 and April 2022) at the Binational Health Council Ambos Nogales (COBINAS) reaching close ~60 health and educational coordinators. Another effort included participation at the 1st University of Arizona Binational workshop for Vector borne and zoonotic disease research with 70 participants. EPA shared information on potential funding opportunities and identification of regional priorities to include pesticide resistance, impacts of climate change and vulnerability/social determinates of health related to vector borne and zoonotic diseases.
- Developed a Quarterly Border 2025 Bilingual Newsletter (NL) through Border 2025. The publications are an important tool to maintain Program partners and community stakeholders informed of environmental efforts and the sharing of grant funding opportunities. The NL is also an important tool to maintain transparency and open communication with EPA’s representatives and US-Mexico border team.

Summary of active on-going and completed projects to date
 For complete summary of Sonora Action Plan 2021-2023 see following link:
<https://www.epa.gov/usmexicoborder/region-9-action-plansplanes-de-accion-de-region-9>

| Goals | Air | Water | Waste | Emergency Prep. & Response | Total |
|-------------------------|------------|--------------|--------------|---|--------------|
| Deliverable Achieved | 3 | 2 | 3 | | 8 |
| Significant Progress | 1 | 3 | | | 4 |
| Moderate Progress | | 3 | | 1 | 4 |
| Initial Progress | 5 | 3 | 3 | 10 | 21 |
| No Progress | | 3 | | | 3 |
| TOTAL | 9 | 14 | 6 | 11 | 40 |