



SEMARNAT
SECRETARÍA DEL MEDIO AMBIENTE Y
RECURSOS NATURALES

Border 2025: US-Mexico Environmental Program **Frontera 2025: Programa Ambiental México-EE.UU.**



Regional Coordinators Public Plenary **Plenaria Pública de Coordinadores Regionales** **Arizona- Sonora**



GOBIERNO
DE **SONORA**
**PROTECCIÓN
CIVIL**

Yuma, Arizona / November 13, 2025



GOBIERNO
DE **SONORA**
**COMISIÓN DE
ECOLOGÍA Y DESARROLLO
SUSTENTABLE DEL
ESTADO DE SONORA**



"Opening Prayer and Welcoming Remarks"

By

Neil White – Vice-Chairman of Cocopah Indian Tribe





SEMARNAT
SECRETARÍA DEL MEDIO AMBIENTE Y
RECURSOS NATURALES

REMARKS

Regional Coordinators

- **Karen Peters** – Director – Arizona Department of Environmental Quality (ADEQ)
- **Lic. Carlos Zatarain González** (virtual) – Comisionado Ejecutivo - Comisión de Ecología y Desarrollo Sustentable de Sonora (CEDES)
- **Lic. Ariel Monge Martinez** (virtual) – Vocal Ejecutivo – Comisión Estatal del Agua del Estado de Sonora (CEA)

National Coordinators

- **Sharon Macías Cadena** – Subdirectora de Estrategia Y Política Internacional, Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)
- **Laura Ebbert** – Director, US Environmental Protection Agency (EPA), region 9



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MENTIONS

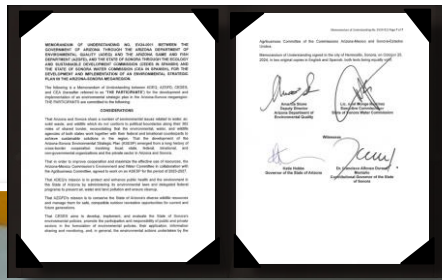
Local & Regional Representatives



Arizona-Sonora Environmental Strategic Plan 2023-2027

Plan Ambiental Estratégico Sonora-Arizona 2023-2027





COMISIÓN
SONORA - ESTADOS UNIDOS



ARIZONA-MEXICO
COMMISSION



ARIZONA-SONORA ENVIRONMENTAL STRATEGIC PLAN 2023-2027
PLAN ESTRATEGICO AMBIENTAL SONORA-ARIZONA 2023-2027

- **14**

Priorities/Prioridades

- Air/Aire - 3
- Water/Agua - 4
- Waste
Mgmnt/Manejo de
Residuos - 4
- Wildlife/Vida
Silvestre - 3

- **30+** projects/proyectos

Period/Periodo

2023-2027

Arizona-Sonora Environmental Strategic Plan 2023-2027

Binational collaboration to improve the environment and
public health in the Arizona-Sonora Border Region.



Plan Estratégico Ambiental Sonora-Arizona 2023-2027

Colaboración binacional para mejorar el medio ambiente y la
salud pública en la región fronteriza Sonora-Arizona.



Air

1. Improve Air Quality from Binational Airsheds Through the Identification of Emission Sources and Implementation of Control Measures
2. Reduce Air Pollution Resulting from Burning of Open Air Solid Waste in Sonora Border Cities
3. Increase Border Community Involvement in Air Quality Topics through Education, Participation, and Outreach

Water

1. Pretreatment and Reuse of Industrial Wastewater with Heavy Metals and Other Pollutants in Nogales, Sonora
2. Develop and/or Implement Initiatives that Support Ongoing Strategies Related to Binational Watersheds
3. Develop Comprehensive Stormwater Management Plans and Promote Green Infrastructure to Improve Water Quality and Mitigate Flood Impacts in Border Cities
4. Strengthen the Institutional Capacity of Local Authorities for Drinking Water, Sewage, and Stormwater in Sonora Border Cities

Aire

1. Mejorar la calidad del aire en cuencas atmosféricas binacionales mediante la identificación de las fuentes emisoras y la implementación de medidas de control
2. Disminuir la contaminación atmosférica que resulta de la quema de residuos sólidos a cielo abierto en ciudades fronterizas de Sonora
3. Fomentar el involucramiento de las comunidades fronterizas en temas de calidad del aire a través de la educación, participación y difusión

Agua

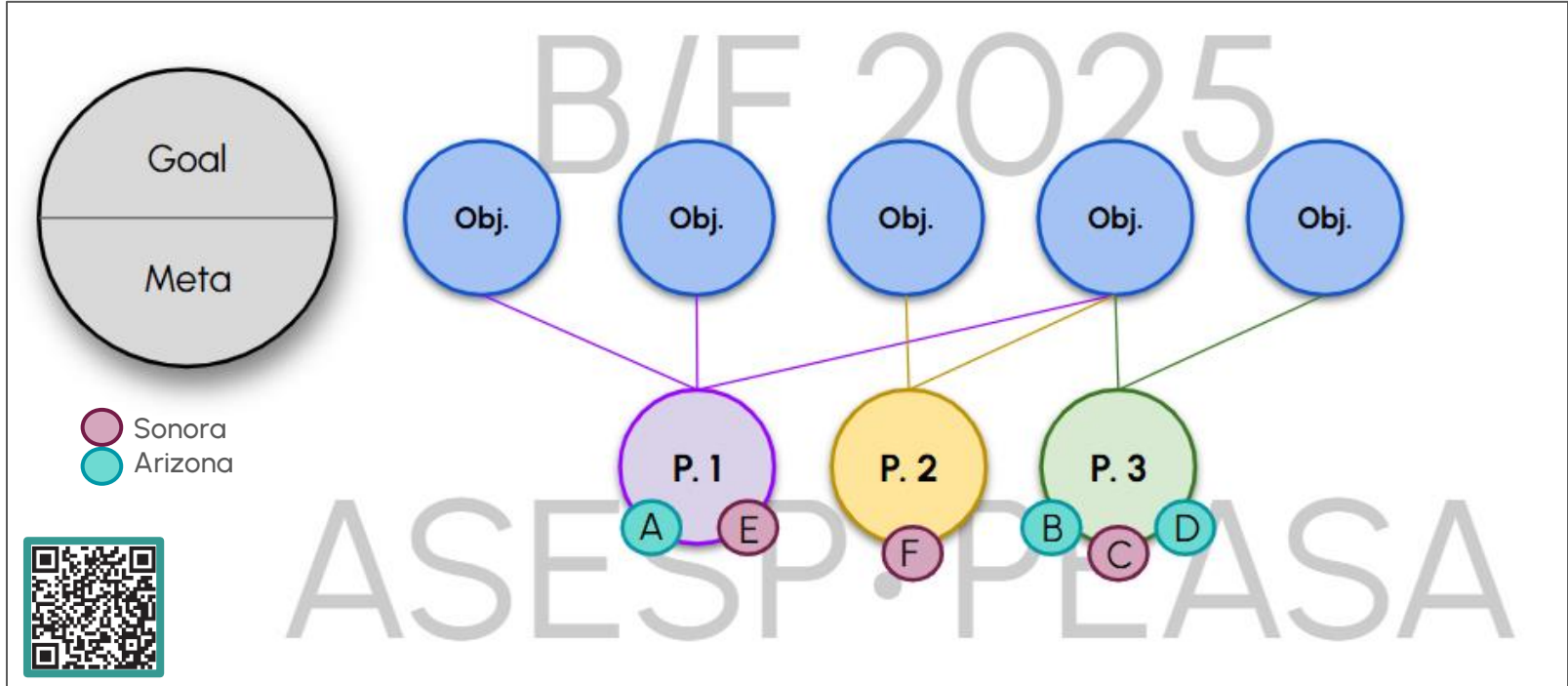
1. Pretratamiento y reúso de aguas residuales industriales con metales pesados y otros contaminantes en Nogales, Sonora
2. Desarrollar y/o implementar iniciativas que apoyen estrategias en marcha relacionadas a las cuencas binacionales
3. Impulsar planes de manejo integral de aguas pluviales y desarrollar infraestructura verde para mejorar la calidad del agua y mitigar los impactos que generan las inundaciones en ciudades fronterizas
4. Fortalecer la capacidad institucional de las autoridades locales relacionadas con infraestructura hidráulica, sanitaria y pluvial de las ciudades fronterizas en Sonora



Waste	
1.	Integration of Waste Management Strategies to Reduce Illegal Dumping, Streamline Sustainable Material Recovery, and Promote Proper Final Disposal of Waste
2.	Develop Recycling Programs in Border Communities between Sonora and Arizona
3.	Implementation of Local Schemes for Solid Waste Management in the Industrial Sector of Sonora Border Cities to Encourage the Development of Circular Economy Systems
4.	Community Outreach Efforts to Improve Waste Management Behavior and Regulation Compliance
Wildlife	
1.	Wildlife Inventory in Private Ranches in Sonora
2.	Sonoran Pronghorn Binational Recovery
3.	Masked Bobwhite Quail Reintroduction in Sonora

Residuos	
1.	Integración de estrategias de manejo integral de residuos para reducir la proliferación de tiraderos clandestinos, simplificar la recuperación de materiales sustentables, y promover la adecuada disposición final de los residuos
2.	Desarrollar programas de reciclaje en comunidades fronterizas entre Arizona y Sonora
3.	Implementar esquemas locales para el manejo de residuos en el sector de industrial de ciudades fronterizas en Sonora para fomentar el desarrollo de sistemas de economía circular
4.	Esfuerzos de concientización para mejorar la gestión de residuos y el cumplimiento del marco regulatorio
Vida Silvestre	
1.	Inventario de Vida Silvestre en Ranchos Privados en Sonora
2.	Recuperación Binacional del Berrendo Sonorense
3.	Reintroducción de la Codorniz Mascarita en Sonora





Goal 1:
Reduce Air Pollution

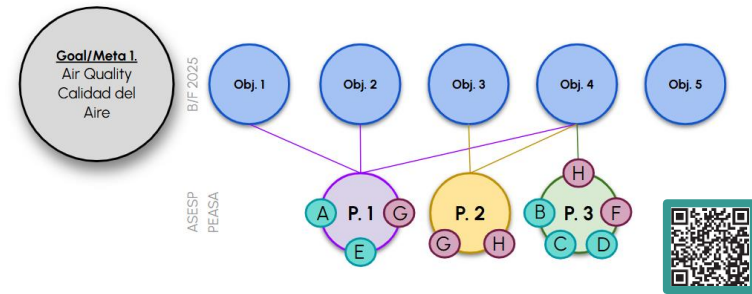
META 1:
Reducir la Contaminación del Aire

Regional Accomplishments (2024-2025)

Logros Regionales (2024-2025)



- A. Binational Air Quality Monitoring / Monitoreo Binacional de Calidad del Aire
- B. Hands-On Educational Activities / Actividades Prácticas Educativas
- C. Binational Calendar and School Murals / Calendario Binacional y Murales Escolares
- D. DIY Filters / Filtros Caseros (Hágalo Usted Mismo)
- E. Emissions Inventories and State Implementation Plans / Inventarios de Emisiones y Planes de Implementación Estatal
- F. Environmental education program “Clean Air, Safe Future” / Programa de Educación Ambiental “Aire Puro, Futuro Seguro”
- G. Low-cost sensor leasing for monitoring in border cities / Arrendamiento de sensores de bajo costo para monitoreo en las ciudades fronterizas
- H. Dissemination of messages through media outlets to raise public awareness / Difusión de mensajes en medios de comunicación para la concientización de la población.



Vision for 2026

Visión para el 2026



- A. Increase the number of reforestation campaigns in border cities / Aumentar el número de campañas de reforestación en los municipios fronterizos.
- B. Update the ProAire 2027-2036 / Actualización del ProAire 2027-2036.
 - a. Create task forces for air quality data analysis in the border region / Realizar mesas de trabajo para el análisis de los datos de calidad del aire en la región fronteriza.
- C. Continue with training the local border authorities on air quality issues / Continuar con la capacitación a Autoridades Municipales fronterizas en temas de Calidad del Aire.
- D. Monitoring in border stations data linkage with SINAICA / Vinculación de datos de estaciones en la frontera al SINAICA
- E. Add ozone precursor monitoring at SLRC / Añadir monitoreo de precursores de ozono en SLRC
- F. Continue pursuing education and community engagement projects / Continuar impulsando proyectos de educación y participación comunitaria

Goal 2:
Improve Water Quality

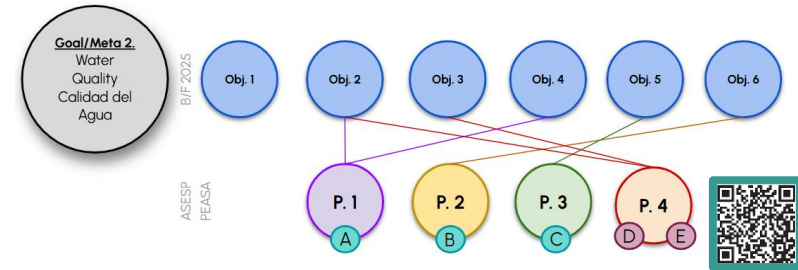
META 2:
Mejorar la Calidad del Agua

Regional Accomplishments (2024-2025)

Logros Regionales (2024-2025)



- A. Pretreatment and Reuse of Industrial Wastewater with Heavy Metals and Other Pollutants in Nogales, Son. / Pretratamiento y Reuso de Agua Residual Industrial con Metales Pesados y Otros Contaminantes en Nogales, Son.
- B. Oso Wash Nature Based Solution / Solución Basada en la Naturaleza en el Oso Wash
- C. Green Infrastructure - Rain Gardens in Ambos Nogales / Infraestructura Verde - Jardines de Lluvia en Ambos Nogales



Regional Accomplishments (2024-2025)

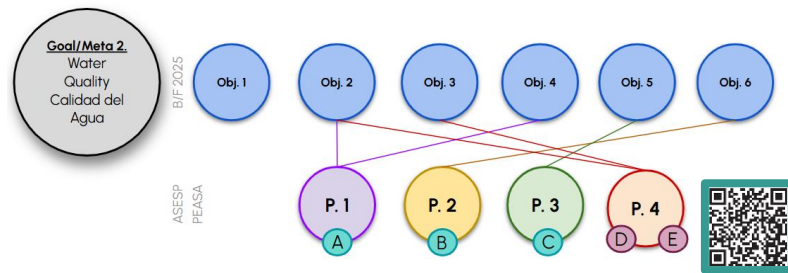
Logros Regionales (2024-2025)



D. Strengthen the Institutional Capacity of Naco, Sonora Water Utilities / Fortalecimiento Institucional OOMAPAS Naco, Sonora.

“Apoyo Técnico Binacional en Naco, Sonora”

- Intervenciones de la CEA ante incidentes transfronterizos;
- Fortalecimiento institucional OOMAPAS Naco; coordinación con programas alineados a la Meta 2.



Regional Accomplishments (2024-2025)

Logros Regionales (2024-2025)

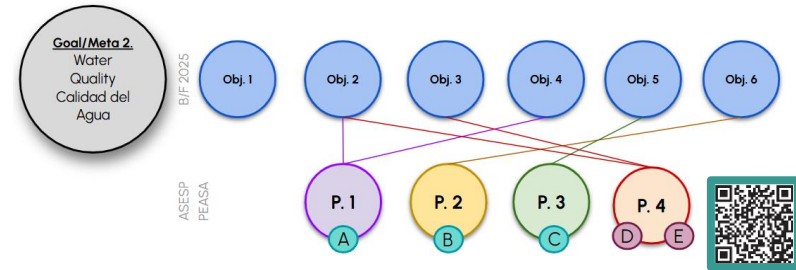


E. Strengthen the Institutional Capacity of Nogales, Sonora Water Utilities / Fortalecimiento Institucional OOMAPAS Nogales, Sonora

“Avance de Obra Los Alisos – Nogales, Sonora

“Infraestructura para la mejora de la calidad del agua fronteriza”

Contenido: Avance 87.92%, inversión \$39 MDP, etapa final de instalación de equipos UV y secado de lodos.



Vision for 2026

Visión para el 2026



Obj. 2a: Increase access to safe drinking water and wastewater treatment in underserved communities.

- Underground water quality in Yuma, Arizona/San Luis Rio Colorado, Sonora region.

Obj. 2a: Aumentar el acceso a agua potable segura y a tratamiento de aguas residuales en comunidades desatendidas.

- Calidad del agua subterránea en la región de Yuma, Arizona/San Luis Rio Colorado, Sonora.

Goal 3:

**Promote Sustainable Materials and Waste Management,
and Clean Sites**

META 3:

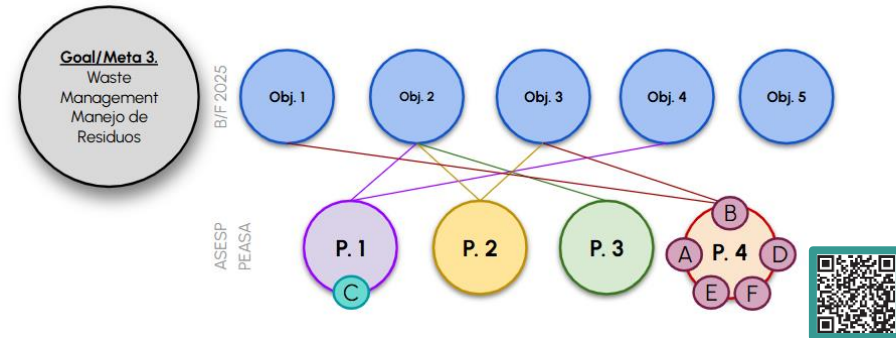
**Promover el Manejo Integral de Materiales y Residuos,
y Sitios Limpios**

Regional Accomplishments (2024-2025)

Logros Regionales (2024-2025)



- A. Waste Management Regulations Seminar for the Private Sector** / Seminario de Reglamento de Residuos para el Sector Privado
- B. Training module on Environmental Impact and Risk** / Módulo de capacitación sobre Impacto y Riesgo Ambiental
- C. Combating Food Waste Through Compost Science** / Combatir el Desperdicio de Alimentos Mediante Proyectos Científicos de Composta.
- D. Special Handling Waste and Emissions** / Residuos de Manejo Especial y Emisiones
- E. Best Practices for Compaction Equipment Operators at NadBank Landfills** / Buenas prácticas para operadores de equipos de compactación en Rellenos Sanitarios de NADBank
- F. Environmental and Health Awareness, Air Quality and Waste Management in Naco, Sonora/**
Concientización Ambiental y de Salud, Calidad del Aire y Manejo de Residuos Sólidos en Naco, Sonora



Vision for 2026

Visión para el 2026



A. Elaboración de Planes de Manejo Integral de Residuos de Manejo Especial: neumáticos de desecho, residuos de la construcción y demolición y residuos orgánicos / Integrated Plans of Special- Handling Waste: wasted tires, debris and organic waste.

B. Capacitación sobre el cumplimiento ambiental en materia residuos a cámaras empresariales y autoridades locales / Training on environmental compliance in waste to business chambers and municipalities.

C. Publicación oficial del Programa para la Prevención y Gestión Integral de Residuos de Manejo Especial del Estado de Sonora / Official publication of the Program for the Prevention and Comprehensive Management of Special Handling Waste of the State of Sonora.

D. Desarrollar programas de reciclaje en comunidades fronterizas de Arizona / Develop recycling programs in Arizona border communities

Goal 4:

Improve Joint Preparedness for and Response to Hazardous Environmental Emergencies

META 4:

Mejorar la Preparación Conjunta y Respuesta a Emergencias Ambientales Peligrosas

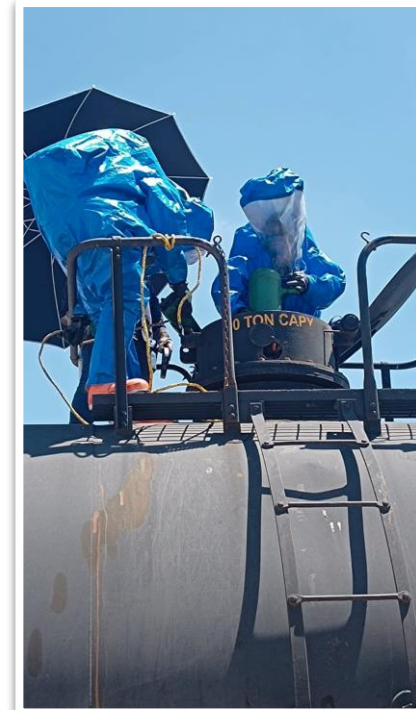
ARIZONA



GOBIERNO
DE SONORA
COORDINACIÓN ESTATAL DE
**PROTECCIÓN
CIVIL**

Regional Accomplishments (2024-2025)

Logros Regionales (2024-2025)



Regional Accomplishments (2024-2025)

Logros Regionales (2024-2025)





Environmental Health

Salud Ambiental

Border 2025 Guiding Principles at a glance



- **Environmental health continues to be a priority of the program**
 - Expected to remain a guiding principle as we plan for Border 2035
- **Focusing on topics such as: extreme heat; asthma and respiratory illness; lead poisoning prevention; valley fever; and exposure to pesticides and other toxic substances**
- **Project with PROAES, “Project on environmental health and awareness, waste, air quality and waste management in Naco, Sonora,” closed this summer**
- **Planning with NADBank to fund two new environmental health focused projects in the coming months**
 - One with Arizona Department of Environmental Quality and another with the County of San Diego led San Diego Imperial Border Health Collaborative



Air Quality Impacts on Environmental Health: Environmental Education for Children in Yuma County, Arizona



- Partnership between ADEQ, Regional Center for Border Health, NADBank, and EPA
- Builds on ADEQ's work teaching students about air quality with the PocketLab air sensors
- Engages elementary school students to think about environmental health and air quality in their communities through drawings and murals
- Expected start date of later this winter/early Spring



2026 San Diego & Imperial Counties Border Health Symposium



- Partnership between EPA, NADB and the San Diego Imperial County Border Health Collaborative (SDIBHC)
- Two symposiums, one in San Diego County and another in Imperial County
- Convenes stakeholders to address pressing environmental health issues affecting both counties
 - Topics include: Tijuana transboundary sewage; lithium-ion extraction; lithium-ion battery storage facilities; and high asthma rates among school children
- Expected to take place Summer of 2026





**If you have any questions or concerns,
please don't hesitate to reach out to me!**

Anthony Isham – Environmental Health &
Communications Coordinator

USEPA Region 9 Border Program

Isham.anthony@epa.gov

619-849-1034





Medio Ambiente
Secretaría de Medio Ambiente y Recursos Naturales

Programa Frontera 2025

Avances y perspectivas federales



2025
Año de
La Mujer
Indígena



Medio Ambiente
Secretaría de Medio Ambiente y Recursos Naturales

Cierre del Programa Frontera 2025

4 metas : Aire, Agua, Residuos y
Emergencias químicas



2025
Año de
La Mujer
Indígena

Programa Frontera 2035

Conversaciones a nivel federal



Gobierno de
México

Medio Ambiente
Secretaría de Medio Ambiente y Recursos Naturales

25
ANIVERSARIO

- Mismas metas para profundizar en nuestro actuar.
- Mejora de la comunicación entre niveles involucrados para dar seguimiento.
- Horizonte más amplio que permita avanzar y reflejar de manera más profunda el trabajo llevado a cabo.
- Componente transversal de salud en todas las metas del nuevo programa.



2025
Año de
**La Mujer
Indígena**



Medio Ambiente
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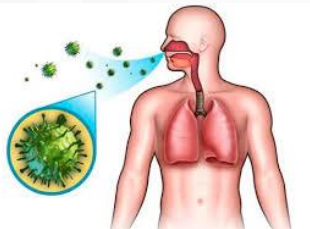
Programa Frontera 2035

Conversaciones a nivel federal

- Revisión de los objetivos a nivel federal.
- Coordinación regional doble del lado mexicano, estatal-oficinas estatales SEMARNAT.
- Reforzamiento de la meta 4 con la participación de Protección Civil de México.
- Incorporación de un segundo copresidente para la meta 3 para el tema de residuos peligrosos.
- **Incorporación de la Secretaría de Salud- Comisión de Salud Fronteriza México-Estados Unidos.**



Medio Ambiente
Secretaría de Medio Ambiente y Recursos Naturales



2025
Año de
**La Mujer
Indígena**



Programa Frontera 2035

Siguientes pasos



Medio Ambiente
Secretaría de Medio Ambiente y Recursos Naturales

- Lanzamiento de Reporte de logros a inicios de 2026.
- Definición de las metas del siguiente programa.
- Consultas internas a nivel regional y públicamente.
- **Lanzamiento en el año 2026.**



2025
Año de
**La Mujer
Indígena**



North American Development Bank



Established in 1994, Headquartered in San Antonio, TX (Cd. Juarez, CHIH)

WHAT WE DO

NADBank supports sustainable infrastructure that will prevent, control or reduce environmental pollutants, improve the drinking water supply or protect flora and fauna, provided that such projects also improve human health, promote sustainable development and/or contribute to a higher quality of life.



WATER

- » Water
- » Wastewater
- » Conservation
- » Stormwater



SOLID WASTE

- » Municipal
- » Industrial
- » Recycling



AIR QUALITY

- » Mobility
- » Paving
- » Border crossings
- » Industrial emissions



SUSTAINABLE ENERGY

- » Generation
- » Storage
- » Efficient use



SUSTAINABLE CITIES

- » Urban development
- » Sustainable Buildings
- » Industrial parks



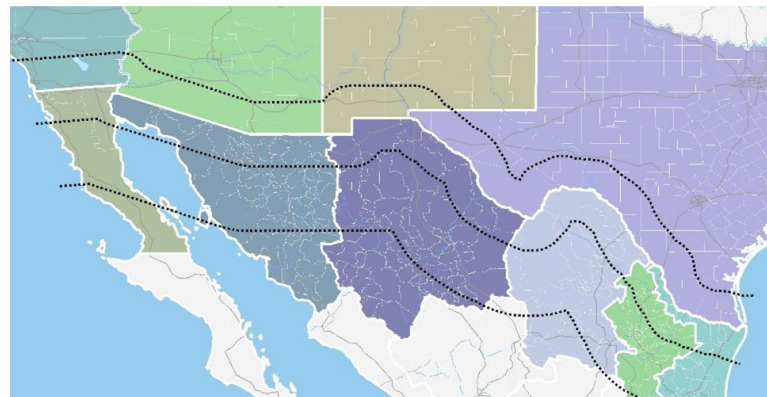
SUSTAINABLE PRODUCTION

- » Green manufacturing and green products
- » Food value chains

WHERE WE SERVE

Eligible projects must be located within:

- » 100 km (62 miles) north of the international boundary in the four U.S. states of Arizona, California, New Mexico, and Texas;
- » 300 km (186 miles) south of the border in the six Mexican states of Baja California, Chihuahua, Coahuila, Nuevo Leon, Sonora, and Tamaulipas.



Geographic Jurisdiction

NADBank Funding Programs – www.nadbank.org



Loans & Related Financial Services	» Direct financing to public and private entities » Tenors of up to 30 years » Fixed or variable rates in U.S. dollars or Mexican pesos » Technical support, due-diligence coordination and project structuring services	Technical Assistance	Technical Assistance Program (TAP) » NADBank-funded grants & technical expertise for planning, designing or developing projects, strengthening capacities, as well as generating knowledge & exploring emerging sectors
	Green Loan Program » Lending to financial intermediaries for the funding of small green projects		Project Development Assistance Program (PDAP) » EPA-funded grants to support communities in the development of water and wastewater projects that have been prioritized by EPA to receive a BEIF grant
Grants	Community Assistance Program (CAP) » Grants up to US\$750,000 to support the implementation of critical water and solid waste infrastructure projects for economically distressed communities		Border 2025 » Administrative support for this binational program developed by EPA-SEMARNAT » EPA funds local initiatives focused on improving the environment and protecting the health of residents within 100 km of both sides of the border
	Border Environment Infrastructure Fund (BEIF) » EPA-funded grants for priority water and wastewater projects » Projects must be located within 100 km on either side of the border		

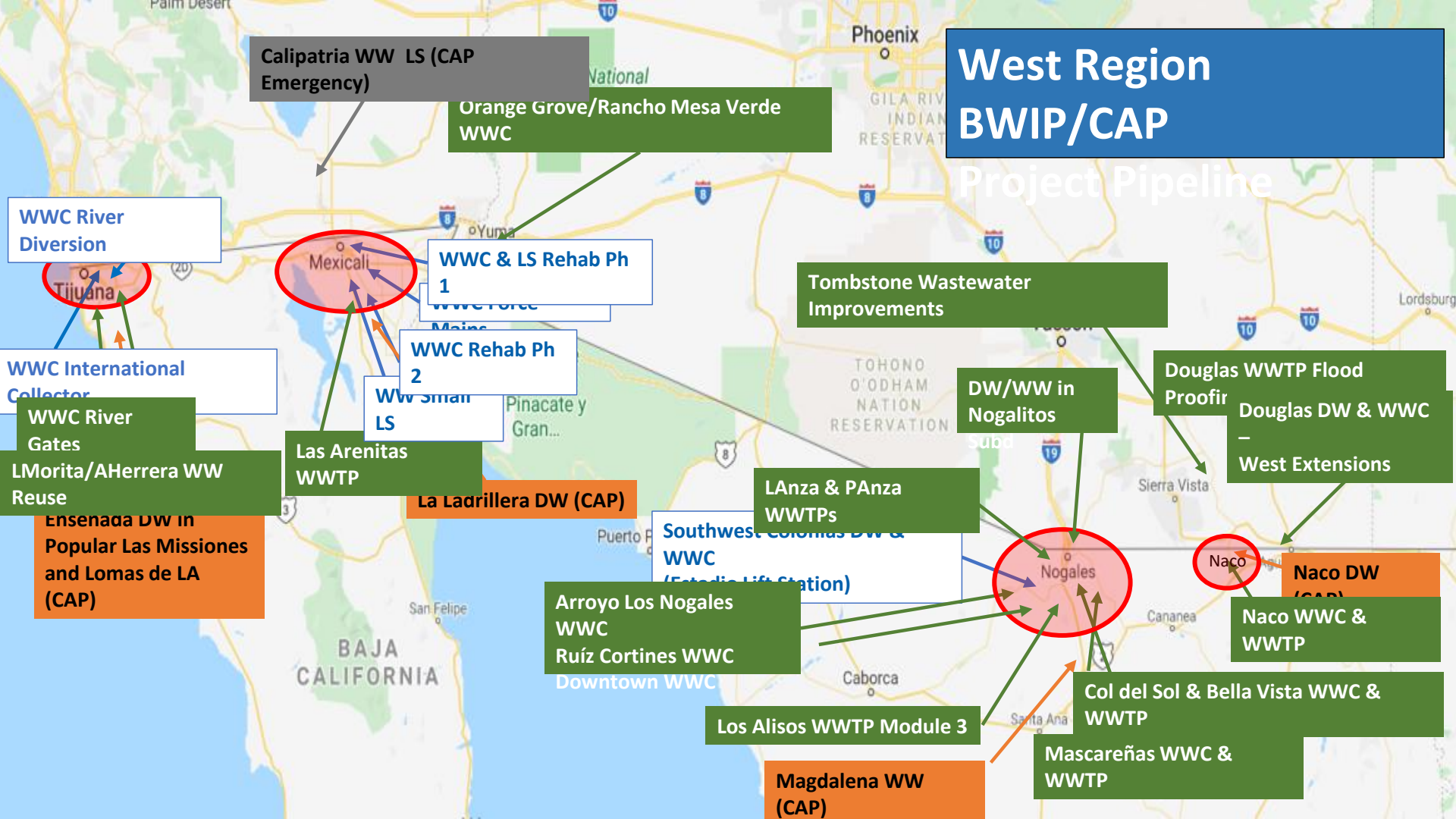
New

CAP EMERGENCY grants up to US\$250,000.

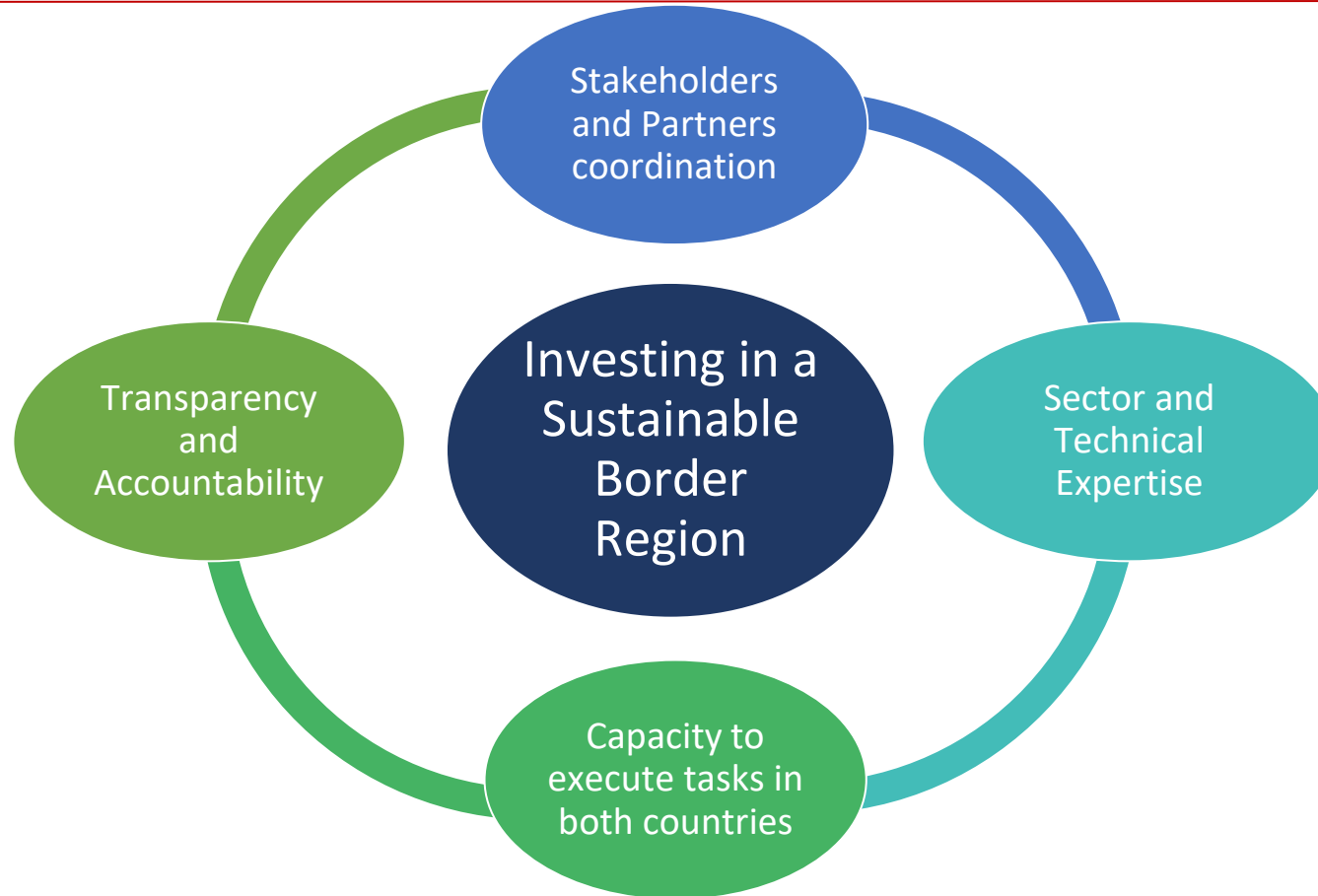
Requires recipient to fund a Repair and Replacement Reserve (RRR) in an amount, at least, equal to CAP grant.

Water Resiliency Fund (WRF)

Prioritizes initiatives that support water conservation and diversification of supply sources, with the overarching goal of promoting a more efficient use of limited water resources and enhancing the capacity of the region to withstand droughts and other extreme climatic events



NADBank's Role in supporting the Border Program



B2025 Projects Under Development



San Diego & Imperial Counties Border Region: Collaborative Approaches for Environmental Health

Sponsor:	Public Health Services, County of San Diego
Estimated Cost:	US\$ 40,000
B2025 Funding:	US\$ 40,000
Key Partners:	Office of Border Health, Public Health Services, County of San Diego, the SDBIHC
Pop. to Benefit:	100 persons (symposium)



- Outputs:** The project consists of the elaboration of a binational symposium as an opportunity to convene federal, state, and local public and private partners for both counties.
- Host an Environmental Health Symposium Convening 80+ attendees in San Diego County and Imperial County.
 - Increase awareness of regional environmental health issues and available resources
 - Identify opportunities for increased collaboration and mutual projects of interest.

Air Quality impacts on Environmental Health: Environmental Education for Children in Yuma County, Arizona

Sponsor:	Arizona Department of Environmental Quality (ADEQ)
Estimated Cost:	US\$ 35,000
B2025 Funding:	US\$ 30,000
Key Partners:	Regional Center for Border Health (RCBH)
Pop. to Benefit:	Yuma residents and Cocopah Indian Tribe



- Outputs:** The overall objective is to improve public awareness and implement best practices to mitigate air pollution exposure among school children and people with respiratory issues.
- Extending reach to the local schools to participate in air quality and environmental health public awareness programs.
 - Raise awareness among residents on the impacts of air quality on environmental health.
Provide youth and adults diagnosed with respiratory conditions tools to understand how they can protect their indoor air.

E-waste resource guide for the US-MX border region

Sponsor:	Fundacion Helice NGO
Estimated Cost:	US\$ 79,836
B2025 Funding:	US\$ 79,836
Key Partners:	Binational NGOs, Industrial Associations
Pop. to Benefit:	Residents along the Border



Outputs: The overall objective is to develop a guide which will address legal and policy aspects to be considered when executing e-waste-related actions, it will explain best practices, technologies that promote the reuse of recovered materials, provide case studies and include a list of local resources in the Border Region.

1. Legal structure and framework on both sides of the border.
2. Analysis of successful case studies and Best Practices.
3. A compendium of tools and additional information helpful for municipalities, policy makers and e-waste organizations along the border.

Border 2025

Community Dialogue
Open Forum

Frontera 2025