

SUSTAINABILITY PARTNERSHIPS IN THE U.S. – MEXICO DRYLANDS REGION: A BINATIONAL CONSENSUS STUDY

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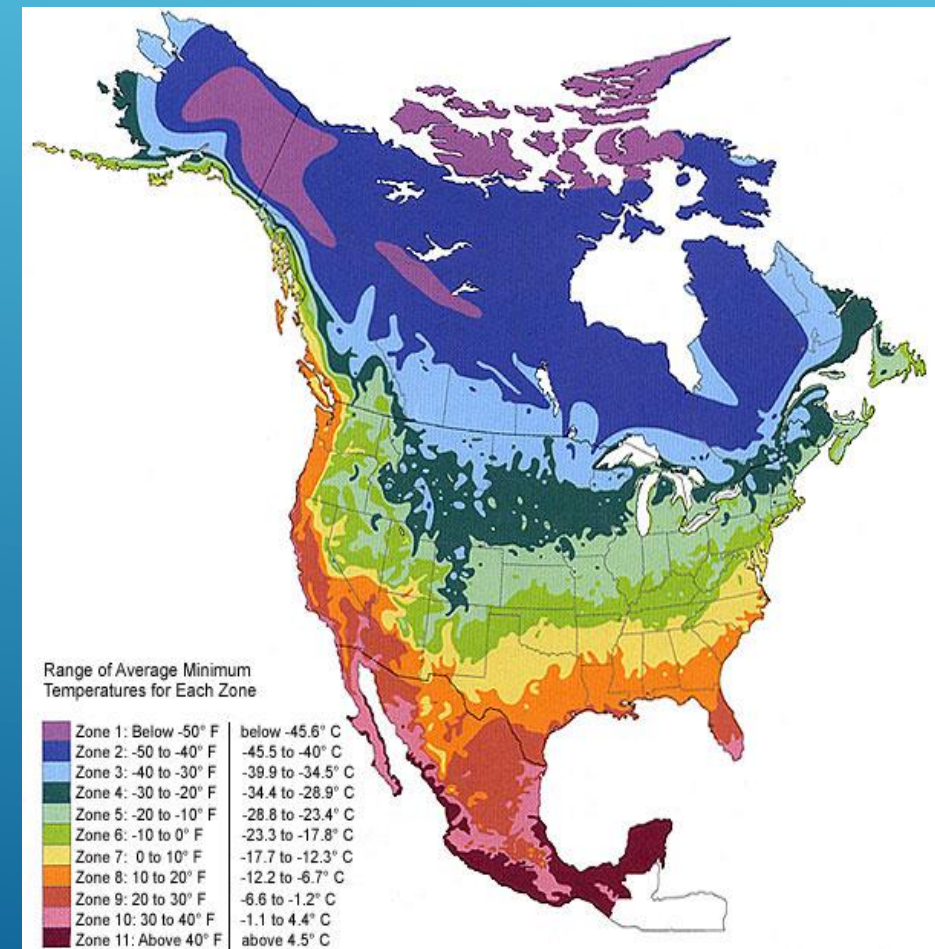
U.S. National Academy of Sciences, Engineering and Medicine – **Jordyn White**, Study
Director; **Toby Warden**, Director, Board on Environmental Change and Society

Academias Mexicanas de Ciencias, Ingeniería, y Medicina – **José Luis Morán-López**,
President, Academia Mexicana de Ciencia; **Jose Franco**, President Emeritus,
Academia Mexicana de Ciencia

Sustainability Partnerships in the U.S. – Mexico Drylands Region

Transboundary Drylands Border Region

Adjoining drylands with shared ecological characteristics, natural-resource based activities (e.g., mining, irrigated agriculture) and socio-economic characteristics



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Motivation for binational collaboration

- ▶ No other heavily populated transboundary region in the Americas is likely to face as great a climate challenge as the U.S.-Mexico border region.
- ▶ Anthropogenic climate change is already affecting regional water resources (reduced streamflow and reservoir storage), natural ecosystems (tree mortality; fire frequency and intensity) and coasts (sea-level rise).
- ▶ Rapid population growth and urbanization are increasing demand on scarce resources.
- ▶ Political and economic factors have major implications for communities and social structure with impacts on human security and well-being.



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Motivation for binational collaboration (cont'd)

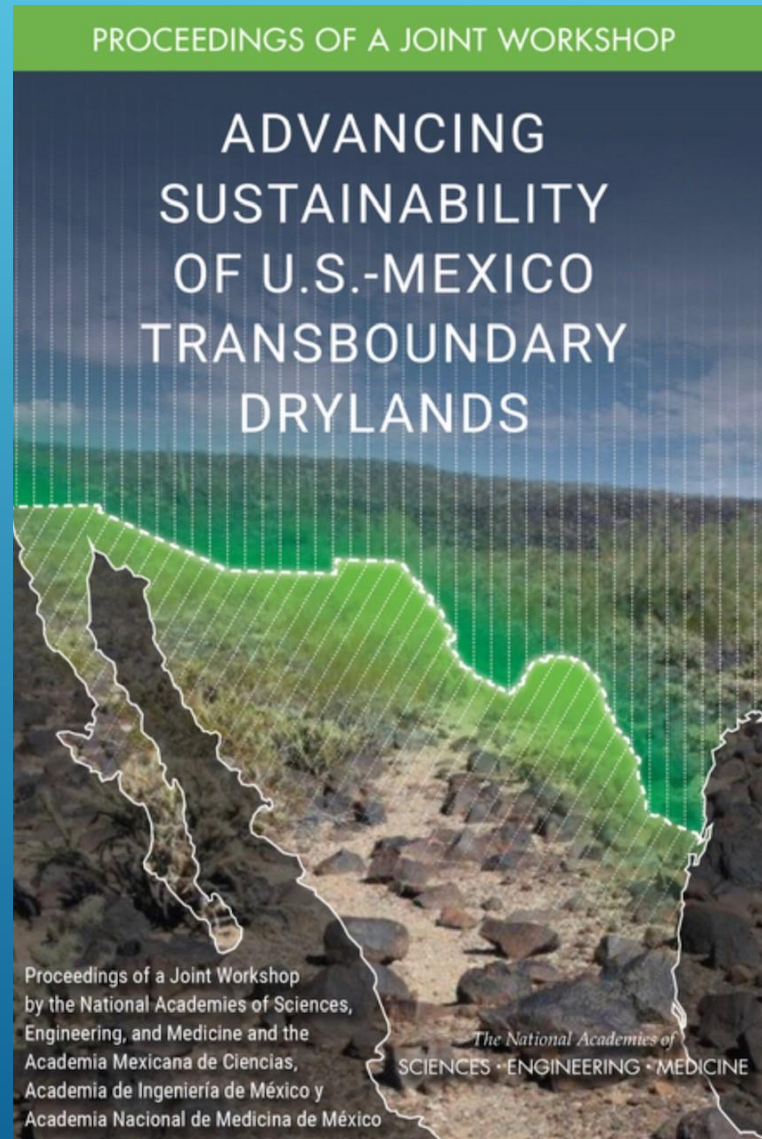
May 2016 NASEM workshop on Building Resilience of the US-Mexico Drylands Region (Washington, DC)

November 2017 Transboundary Drylands Sustainability Workshop planning meeting (Mexico City, Mexico)

May 2018 NASEM – AMC binational workshop on Advancing Sustainability of US – Mexico Transboundary Drylands (San Luis Potosí, Mexico)



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Consensus Study Goals

- ▶ Address select sustainability challenges in the binational drylands region
 - ▶ Guided by insight from 2018 Workshop and the U.N.'s Sustainable Development Goal (SDG) #17
 - ▶ Identify strategies to address specific targets within the relevant SDGs
- ▶ Draw on social science theory to increase partnerships between government agencies, NGOs, and private sector
- ▶ Recommend strategies to consider social and environmental compatibility and the opportunity for economic growth.
- ▶ Identify pathways to action and solutions that can fortify ongoing binational collaboration

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SUSTAINABLE DEVELOPMENT GOAL 17:

Strengthen the means of implementation and revitalize the global partnership for sustainable development

Targets Organized into Five Categories:

- ▶ Finance
- ▶ Technology
- ▶ Capacity Building
- ▶ Trade
- ▶ Systemic Issues

Themes from 2018 Binational Drylands Workshop

- ▶ Funding
- ▶ Data and Intellectual Resources
- ▶ Mitigating Anthropogenic Change
- ▶ Primary Flows through the Region
- ▶ Governance (local, state, binational)

Sustainability Partnerships in the U.S. – Mexico Drylands Region

Consensus Study Committee

Chris Scott (*Chair*), University of Arizona *

Hallie Eakin, Arizona State University *

Kelly Sanders, University of Southern California *

Robert Bullard, Texas Southern University

Bernard Amadei, University of Colorado

Roger Pulwarty, National Oceanic and Atmospheric Administration (NOAA)

Constantino Macías Garcia, Universidad Nacional Autónoma de México *

Natalia Martínez-Tagüeña, Instituto Potosino de Investigación Científica y Tecnológica *

Alfonso Cortez-Lara, El Colegio de la Frontera Norte-Sede Mexicali *

Alma Cota de Yanez, Fundación del Empresariado Sonorense, A.C.

Exequiel Rolón, Fresnillo PLC

Sustainability Partnerships in the U.S. – Mexico Drylands Region

Committee Meetings

March 10-11 – Committee Meeting (Closed), Mexico City, Mexico

April 23-24 – Public Workshop on Strategies for Sustainability Partnerships, Mexico City, Mexico

June 24-25 – Committee Meeting (Closed), Irvine, CA

Report Release – Late Fall 2020