

AGENDA

**Advancing Sustainability of US – Mexico Transboundary Drylands:
A Binational Workshop**

May 2-4, 2018

Instituto Potosino de Investigación Científica y Tecnológica–IPICYT

Auditorium

San Luis Potosí, México

Host Hotel: Hotel Real Plaza, Av. Venustiano Carranza 890, San Luis Potosí

Wednesday, May 2, 2018

Field Observation in Charcas, a town in San Luis Potosí State.

Bus will depart from host hotel at 7am. Day will include a tour that highlights the contrast between the traditional desert areas and the mining and industrial regions, as well as a visit to a small local artifacts museum. Lunch and refreshments will be provided. Group will return to hotel around 5pm. Wear comfortable shoes, hat, and sunscreen, as needed.

Thursday, May 3, 2018

8:30am Welcome and Introductions

Alejandro Ricardo Femat Flores, *Director, IPICYT*

Vaughan Turekian, *Senior Director of the NASEM Office of Science and Technology for Sustainability, and Executive Director of the Division of Policy and Global Affairs*

José Luis Morán, *President, Academia Mexicana de Ciencias*

Christopher Scott, *University of Arizona (Workshop Committee Chair)*

9:00am Purpose of the Workshop

Motivation for the Workshop

Christopher Scott (*Committee Chair*)

José Franco, *Universidad Nacional Autónoma de México (UNAM)*

Brief synopses of the May 2016 NASEM binational workshop on Building Resilience of the US-Mexico Drylands Region, the November 2017 planning meeting in Mexico City for this Sustainability workshop, and other project activities leading up to this binational workshop.

9:20am **Why is Sustainability Science Important? Value of the Workshop**

Ana Escalante Hernández, *Directora del Laboratorio Nacional de Ciencias de la Sostenibilidad, UNAM*

Discussion on sustainability science and the relevant work being conducted.

9:45am **Unpacking the Term “Transboundary Region”**

María Amparo Martínez Arroyo, *Instituto Nacional de Ecología y Cambio Climático (Committee Member)*

Robert Washington-Allen, *University of Nevada – Reno (Committee Member)*

What is meant by the term, what areas, ecosystems and populations are included in the definition, and why it is important to consider the region as a whole?

10:30am Break

11:00am **What We Know about Sustainability in the Region**

Key Sustainability Challenges and Vulnerabilities

Christopher Scott *(Committee Chair)*

Addressing U.S. and Mexico water management (binational allocation and policy challenges, irrigation, surface and groundwater, desalination).

Existing Research

Angelina Martinez-Yrizar, *UNAM*

Identifying binational and regional research approaches that are already in place.

12:00pm **Main Areas of Focus | Overview of Workshop Structure**

Hallie Eakin, *Arizona State University (Committee Member)*

Elisabeth Huber-Sannwald, *IPICYT (Committee Member)*

Dryland areas in the transboundary region share several unique characteristics. The movement of water, people, species, goods and services across the border and throughout the region create interactions that can have positive and negative sustainability implications. The drylands are affected by the paradox of experiencing both an abundance of cultural and ecological richness and an acute scarcity of other precious natural resources. Likewise, they face high environmental variability and extremes that co-occur with abrupt policy changes and market volatility. The challenges and opportunities for sustainable solutions throughout the region will require coordination and collaboration at a variety of levels—local, national, binational, and beyond.

Main Areas of Focus:

- ***Interaction and Flow of Resources, People, and Services***
- ***Scarcity and Abundance of Biotic and Cultural Resources***
- ***Environmental, Political, Socio-Economic, Cultural, Technological Shocks and Stressors***
- ***Governance and Innovation***

Overview of Knowledge Café Breakout Sessions (to be held after lunch)

We will spend the afternoon diving deeper into each of the above four main focus areas. The group will split into working groups, covering two of the focus areas concurrently during the first time block and two more during the second. Each working group will consist of at least two members of the planning committee and one facilitator, and one rapporteur. The working groups will be conducted “Knowledge Café” style, meaning that the majority of the session will be spent in collaborative discussion between all participants. The goal is to collect substantive input on each topic that will potentially inform future sustainability efforts in these areas.

12:30pm Lunch

2:00pm All Participants Proceed After Lunch Directly to Knowledge Café Session 1 or 2

1. Interaction and Flow of Resources, People, and Services

- Rosario Sanchez, Texas A&M University
- José Luis Castro Ruíz, El Colegio de la Frontera Norte

2. Scarcity and Abundance of Biotic and Cultural Resources

- Jadwiga Ziolkowska, University of Oklahoma
- Natalia Martínez Tagüena, IPICYT (Committee Member)

3:45pm Break

4:15pm Knowledge Café Session 3 or 4

3. Environmental, Political, Socio-Economic, Cultural, Technological Shocks and Stressors

- Doug Liden, Environmental Protection Agency
- Jorge Morán Escamilla, El Colegio de San Luis

4. Governance and Innovation

- Ismael Aguilar Barajas, Instituto Tecnológico y de Estudios Superiores de Monterrey
- Jurgen Schmandt, University of Texas, Austin

6:00pm Adjourn Day 1

Friday, May 4, 2018

9:00am Synthesis of Knowledge Cafés – Recap and Future Priorities

We will use the morning to discuss the major themes from Thursday's breakout groups and consider topics and priorities for future research. Facilitators from Knowledge Cafés will moderate these discussions.

9:00am ***Interaction and Flows***

9:45am ***Scarcity and Abundance***

10:30am Break

11:00am ***Shocks and Stressors***

11:45am ***Governance and Innovation***

12:30pm Lunch

2:00pm Innovations and Solutions in Sustainability Science for Dryland Areas

Constantino Macías Garcia, *UNAM (Committee Member)*, Moderator

Discussants:

Jeff Herrick, *US Department of Agriculture*

Elizabeth Weight, *National Oceanic and Atmospheric Administration*

Laureano Alvarez, *North American Development Bank*

Discussion on new approaches to sustainability that could benefit (or are already being implemented in) the drylands region.

3:30pm Break

4:00pm Meeting Wrap-Up and Next Steps

5:00pm Adjourn

This workshop is sponsored by the Mexican Academies of Sciences, Engineering, and Medicine, and the George and Cynthia Mitchell Endowment for Sustainability Sciences at the US National Academy of Sciences.