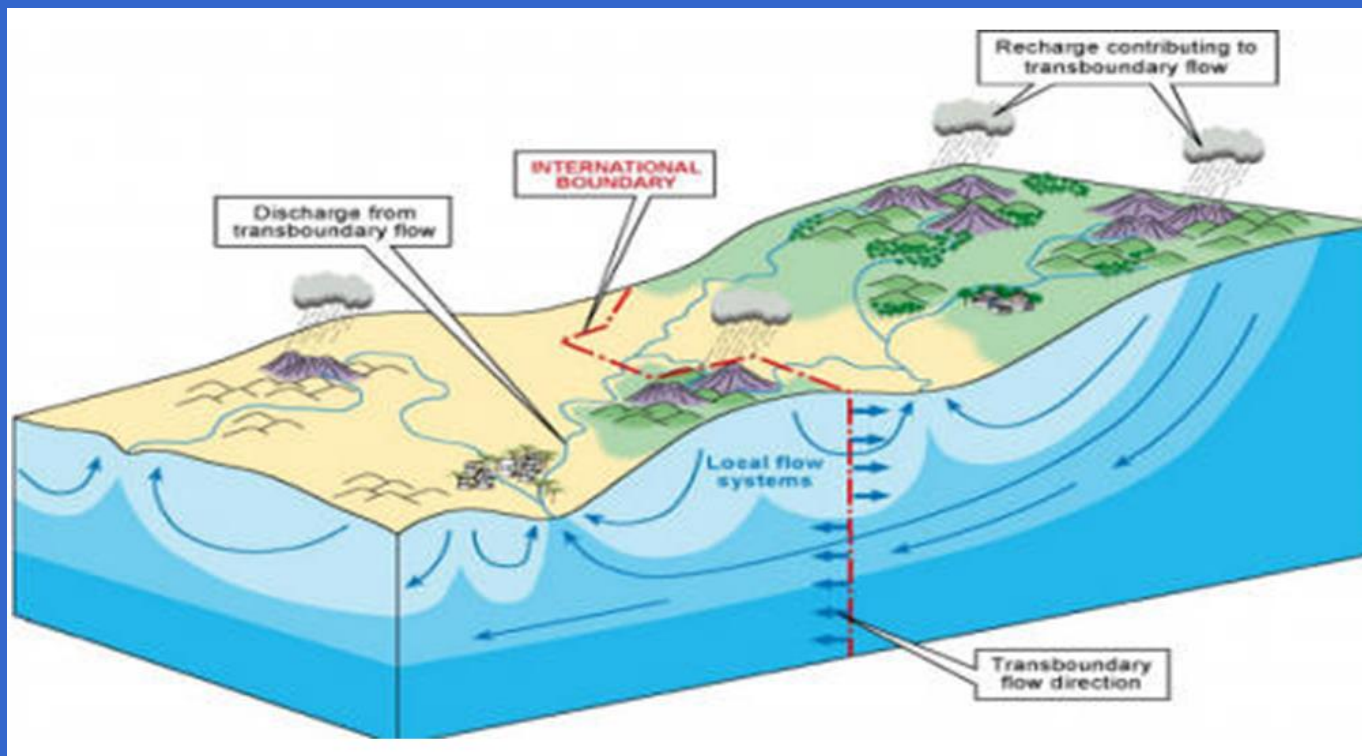
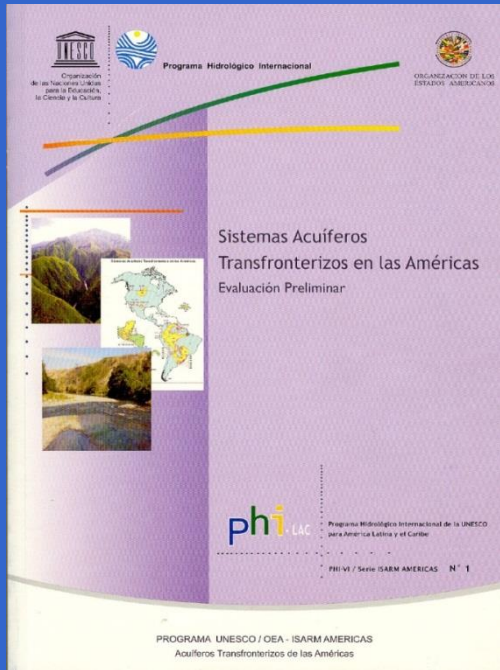


PROGRAMA UNESCO/OEA ISARM AMERICAS (Acuíferos Transfronterizos de las Américas)



Se han publicado cuatro monografías de los Sistemas Acuíferos Transfronterizos: *"Sistemas Acuíferos Transfronterizos, Evaluación Preliminar"*, *"Marco Legal e Institucional en la Gestión"*, *"Aspectos Socioeconómicos, Ambientales y Climáticos"*, *"Estrategia Regional para la Gestión"* que contienen la información aportada por los países del continente

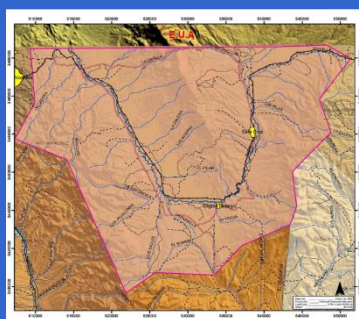
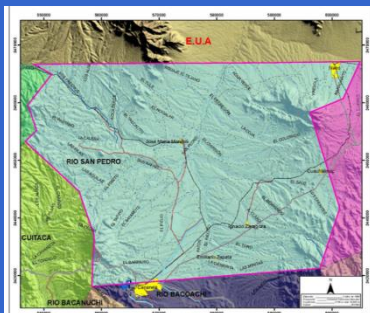
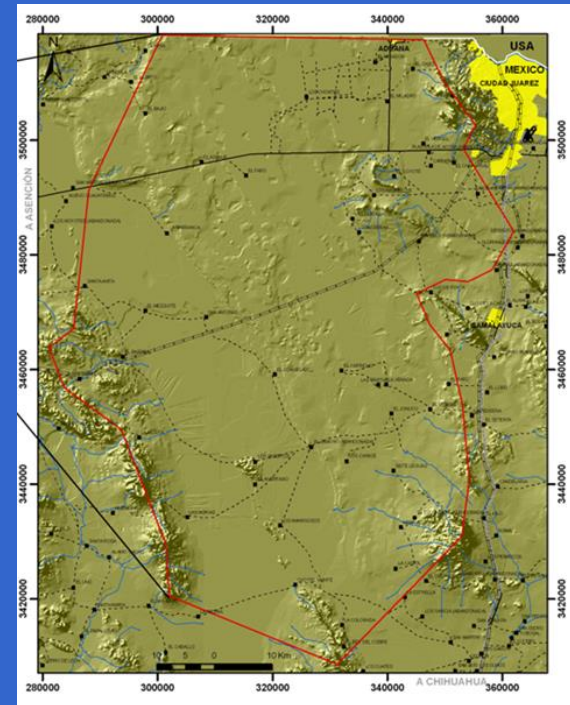


BORRADOR

Sonora-Arizona Río San Pedro y Río Santa Cruz

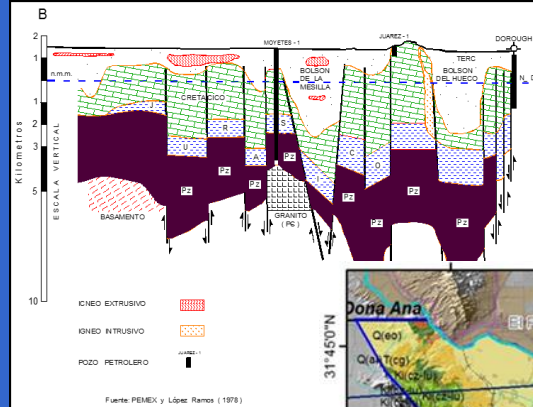
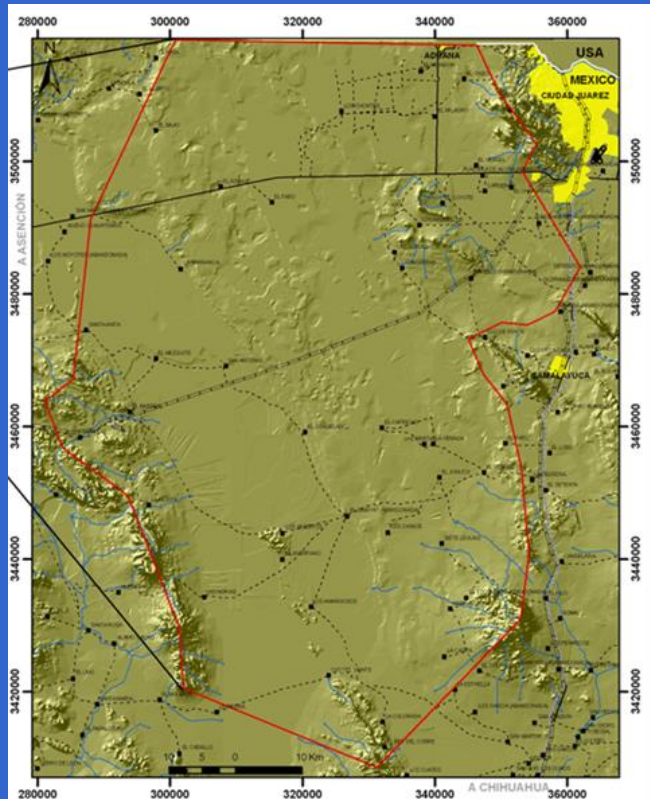


Sonora-Nuevo México-Texas (Primera etapa) Acuífero Conejos -Médanos

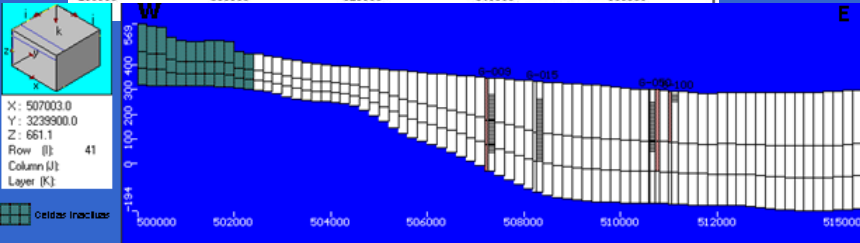
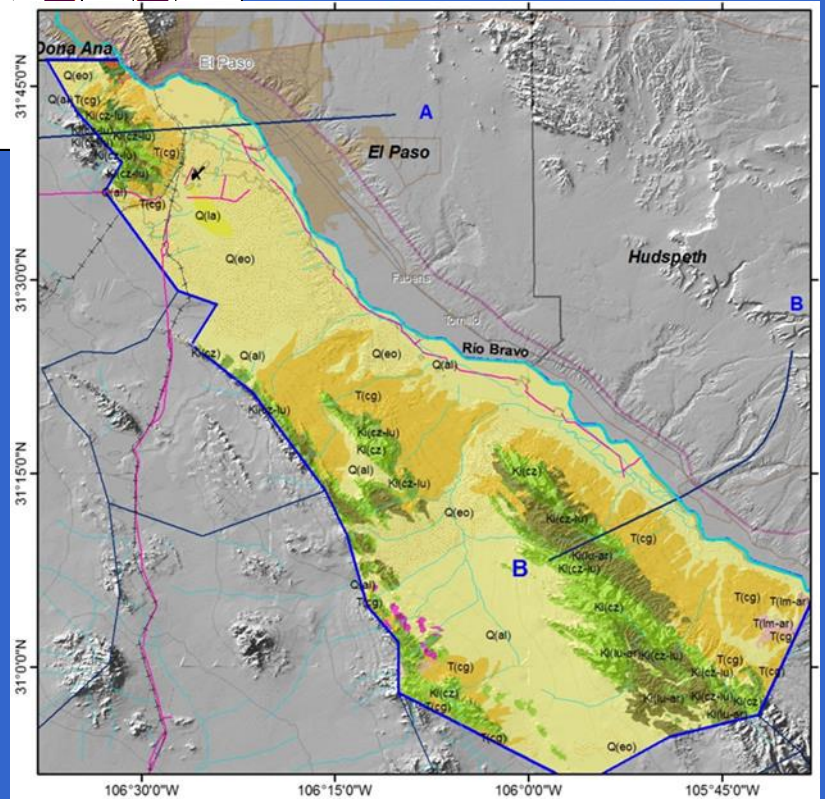




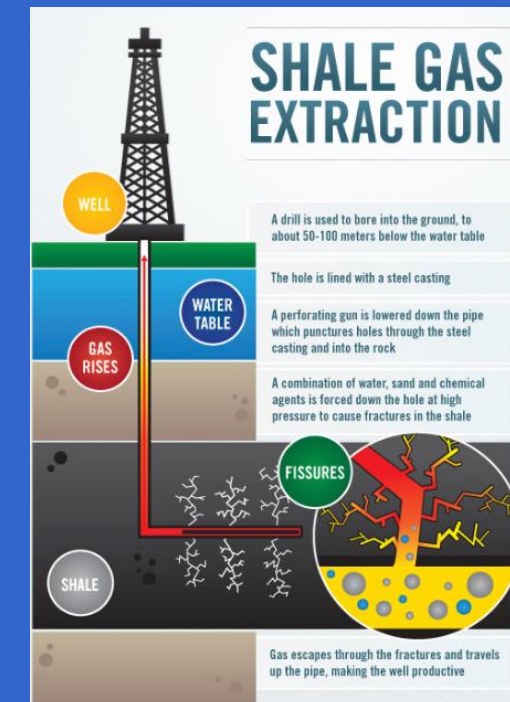
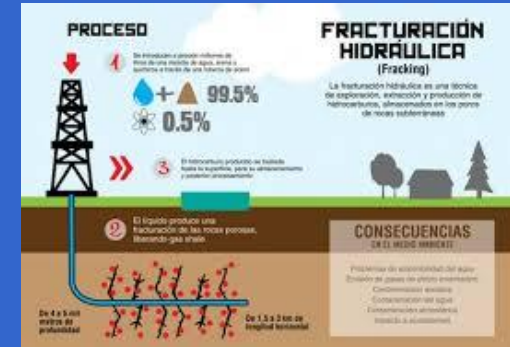
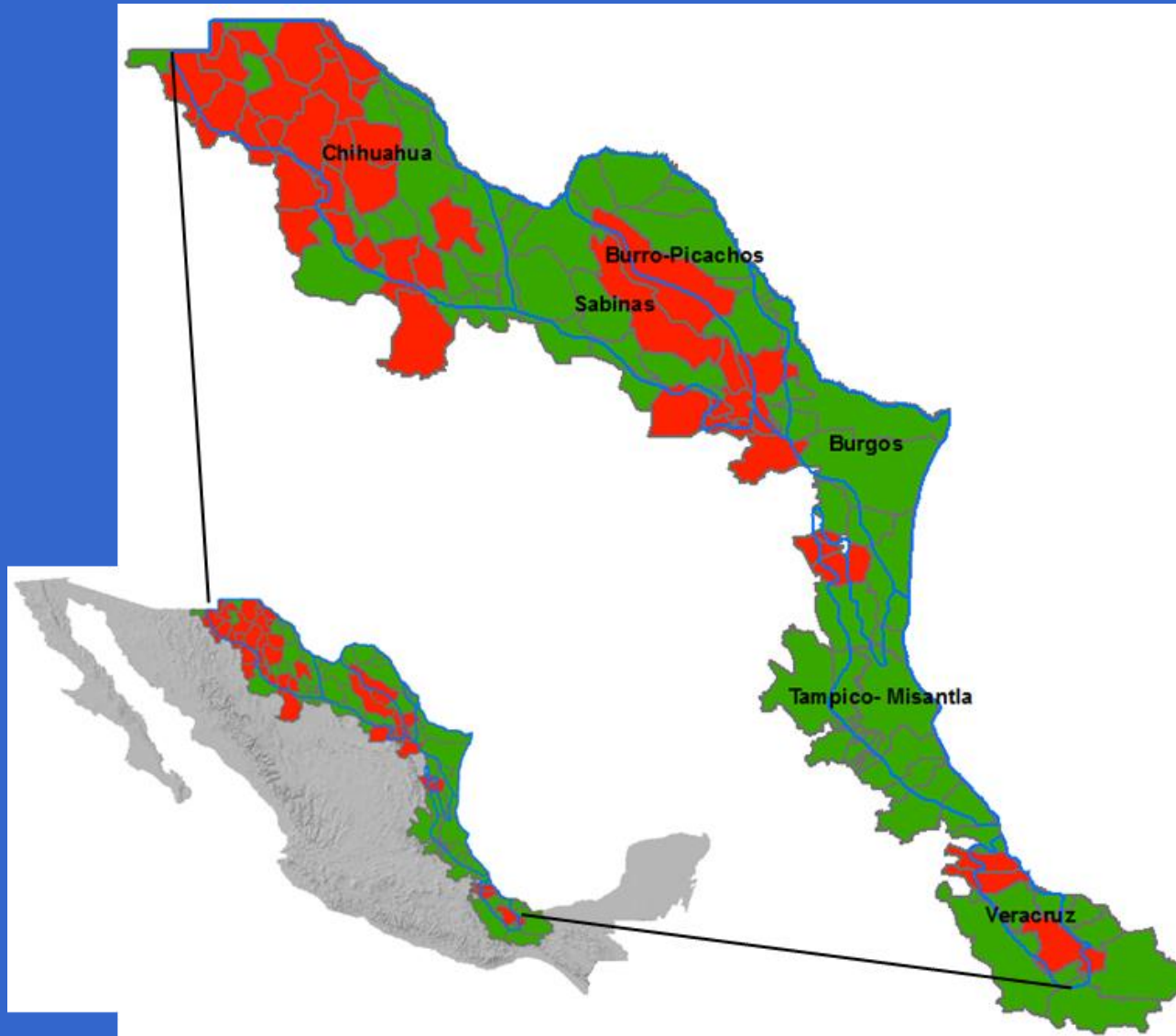
Modelo de simulación hidrodinámica del acuífero Conejos-Médanos. CONAGUA-CILA-UACH



Estudios específicos en el acuífero Valle de Juárez



Estudios hidrogeológicos y específicos en acuíferos fronterizos y transfronterizos ubicados en las cuencas petroleras y gasíferas



Identification, classification and prioritization of transboundary aquifers between Texas and Mexico

Preview *DRAFT*

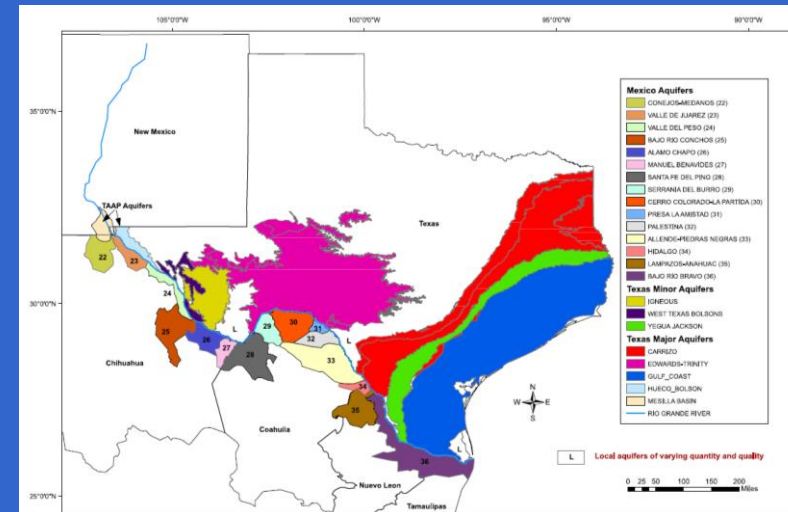
By *Rosario Sanchez and Laura Rodriguez*

1. INTRODUCTION

The most recent study on transboundary aquifers between Mexico and the United States has suggested that there might be up to 36 transboundary aquifers between the two nations (Sanchez et al. 2016). In the case of the border between Mexico and Texas, 15 transboundary aquifers have been reported, but only five aquifers have enough level of confidence on their transboundary linkages, whereas 10 remain inconclusive (see Figure 1). Lack of data, differences in aquifer boundaries delimitations and methodologies, as well as the limited cooperation and coordination among federal and local agencies within and between countries to address groundwater challenges from a binational perspective, has determined the negligent conditions of transboundary groundwater resources between the two countries. Apart from the Yuma Aquifer, which is governed by Minute 242 of the IBWC/CILA and the research that has been developed in recent years supported by the Transboundary Aquifer Assessment Program (TAAP), in 4 selected aquifers (San Pedro and Santa Cruz Transboundary Aquifers between Arizona and Sonora, and the Hueco-Bolson and La Mesilla Aquifers, between Texas, Nuevo Mexico and Chihuahua), the rest of the potential transboundary aquifers remain in solitude.

Groundwater management challenges in the border region are therefore, as important as the number of unknowns in terms of aquifer conditions, transboundary linkages, vulnerabilities and planning scenarios under more stringent water conditions in the border area. Rapid urbanization, population growth and climate change predictions towards a more ordinary drought prone region, requires and demands attention to groundwater resources as surface water has already reached its supply limit. According to the United Nations, the Rio Grande basin is considered the most water stressed basin in the world, and it supplies close to 90% of all agriculture production in Texas. Likewise, it is the source of domestic supply for highly populated cities such as El Paso, Laredo, McAllen, San Antonio in Texas and Ciudad Juarez, Piedras Negras, Nuevo Laredo, Acuna, Reynosa in Mexico. There are also small communities along the border between Chihuahua and Texas east to the Hueco-Bolson that rely completely on groundwater for domestic use.

The purpose of this study is to apply a new approach to identify potential transboundary aquifer areas developing the basis of a new methodology for identification, categorization and prioritization of transboundary aquifers between Mexico and Texas. This new approach is oriented to propose



GRACIAS POR SU ATENCIÓN

