

# Safe Water Project

## INFO SHEET



Methodist Healthcare Ministries announced a new partnership with the Texas A&M University School of Public Health to conduct a two-year study of arsenic and other toxic contaminants occurring in residential drinking water within border colonia communities in the Rio Grande Valley. One study will focus on increasing public awareness of arsenic exposure to the local community. A second study will examine the impact of a locally engaged and trained resident population on water security and common resilience in Texas border communities.

### ► **Project 1: Arsenic Surveillance in Border Communities' Drinking Water**

**Lead: Taehyun Roh, PhD**

#### **Primary Objectives:**

1. Evaluate the burden of arsenic exposure in drinking water
2. Evaluate nutritional status and biomarkers to predict health impacts of chronic arsenic exposure
3. Assess impact of intervention to reduce arsenic exposure in households using tabletop pitchers

#### **Sampling Frame:**

Households within four Colonias and comparison non-Colonia areas will be asked to consent and participate. Areas will be screened using Texas Water Development Board water quality information and selected in consultation with community stakeholders. Hidalgo County will be prioritized to allow some overlap with the activities in the second project (see page 2).



"Serving Humanity to Honor God"



TEXAS A&M UNIVERSITY  
School of Public Health

For more information, contact  
Rae Lynn Mitchell, M.A. at  
979.436-9405 or  
raemitchell@tamu.edu.

# Safe Water Project

## INFO SHEET



### ► Project 2: Characterizing Water Contaminants in Border Communities using Citizen Science

**Lead: Garrett Sansom, PhD**

#### **Primary Objectives:**

1. Train and create Citizen Science Teams from local neighborhoods
2. Conduct focus group meetings to identify community concerns around water quality issues
3. Perform a community health assessment and environmental sampling
4. Disseminate information back to community members and stakeholders

#### **Sampling Frame:**

San Carlos area colonias in Hidalgo County will be selected as the initial site due to strong existing relationships that are needed to develop the proof of concept. A second border community will be selected in consultation with community stakeholders as a fourth project task to pilot test dissemination to other border communities.

### **Community Benefit**

Once the projects are completed in 2024, the findings will be used to create and advocate for public policy solutions aimed at improving the quality of water in some of the most underdeveloped areas in South Texas. The project is a vital first step in creating a proof of concept that will then be applied throughout the Texas-Mexico border to improve the lives of these often overlooked communities.



"Serving Humanity to Honor God"



TEXAS A&M UNIVERSITY  
School of Public Health

For more information, contact  
Rae Lynn Mitchell, M.A. at  
979.436-9405 or  
raemitchell@tamu.edu.