



Arroyo Colorado Watershed Protection Plan Implementation: Low Impact Development

River Basin: Nueces-Rio Grande

Water Body: Arroyo Colorado (Segments 2201 and 2202)

Location: Hidalgo, Cameron, and Willacy counties

Background

The Arroyo Colorado tidal does not meet state water quality standards for dissolved oxygen (DO), and neither segments meet standards for bacteria. The Arroyo Colorado Watershed Partnership developed the Arroyo Colorado Watershed Protection Plan (WPP) in 2007 to address low DO and high bacteria and updated it in 2017. The WPP identifies low impact development (LID) as a key management measure for reducing stormwater runoff volume and pollutants entering the waterways.

Project Descriptions

March 2016 - February 2020

Texas Water Resources Institute (TWRI) is providing technical assistance to the Arroyo Colorado Watershed Partnership in WPP implementation efforts. This includes coordinating with stakeholders and entities and implementing education activities focused on LID. A septic system database is also being developed. TWRI will evaluate progress toward achieving WPP milestones.

December 2016 - August 2020

TWRI and the City of Los Fresnos installed a bioswale to treat stormwater runoff and a rainwater harvesting system at a new 20-acre nature park. TWRI, Texas Stream Team and Los Fresnos ISD are monitoring the effectiveness of a bioswale and wetland at Los Fresnos High School in treating runoff from the parking lot. Students volunteered in planting native plants for these LID installations.

September 2018 - August 2021

Texas A&M University, Kingsville (TAMUK) is monitoring the effectiveness of different filtering media applications in bioswales and bioretention systems for widespread adoption in the watershed. These data will inform cost-benefit analyses used to bolster local ordinances and integrate LID planning. TAMUK will provide training on LID operation and

maintenance, conduct a delineation in the northern watershed boundary, develop the Arroyo Colorado watershed portion of a cyber-infrastructure database, and conduct a study to identify optimal locations within sub watersheds for implementing best management practices.



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For More Information

Project Website

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