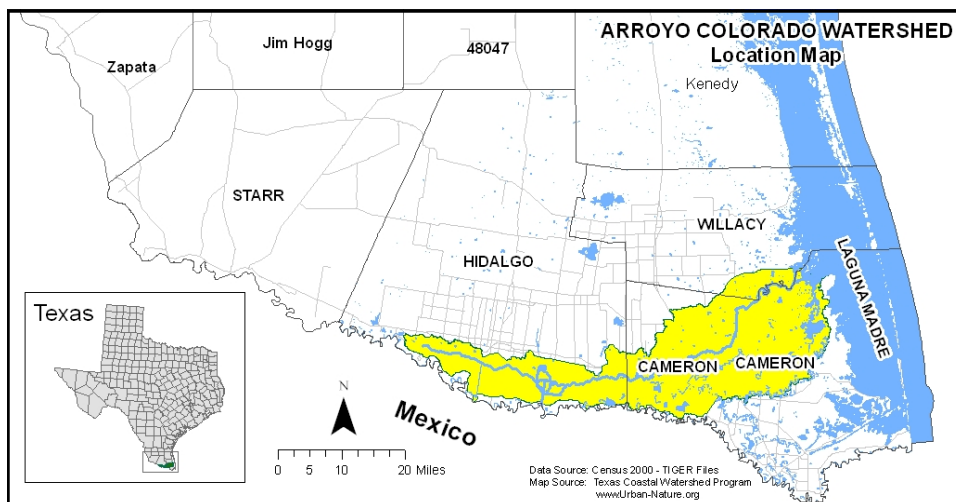


The Arroyo Colorado Watershed and You

Brought to you by:
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The Rio Grande Valley (RGV) is familiar with the “Arroyo” as a recreational area where families and fishermen retreat to have fun. The Arroyo Colorado’s headwaters begin southwest of the city of Mission and end at its confluence with the Lower Laguna Madre in the northeast portion of Cameron County, stretching about 90 miles in length and encompassing approximately 451,000 acres of land. Of this area, about 330,000 acres are agricultural lands with 290,000 acres of irrigated land within the watershed.

The Arroyo Colorado is an important natural resource to the RGV, not only because of its recreational usage but also because of the habitat it provides and the value of it as a drainage system to agricultural and urban communities. Losses of natural habitat, engineered modifications, and human activities have significantly degraded water quality in the stream. From a natural resource and ecological perspective, the Arroyo Colorado is contaminated with many pollutants from many different sources.



Pollution, mostly anthropogenic, comes from indirect and direct sources that enter the waterway. For example, storm and irrigation runoff water can contain nutrients from fertilizers; heavy metals, such as lead and mercury; yard or agricultural chemicals; and oils from illegal dumping. When stormwater or irrigation water runs over the land, it picks up pollutants and carries them into the Arroyo Colorado, negatively affecting the stream’s aquatic ecosystems.

The most visible evidence of water quality problems in the watershed is the periodic occurrence of fish kills, most commonly in the upstream portion of the Tidal segment. The primary cause of these fish kills is low levels of dissolved oxygen within the water. What causes dissolved oxygen to fluctuate from high to low is a combination of factors. When a storm occurs, rainwater runoff carries nutrients from the land to the Arroyo Colorado. In the same way, irrigation runoff from fields can carry nutrients to the Arroyo Colorado. Plants use these nutrients and sunlight to photosynthesize during the day. When excess nutrients are in the water, plants grow

rapidly causing massive algal blooms and high dissolved oxygen levels. The die-off of these algal cells at night cause the water body to become depleted in dissolved oxygen as the dead algae consumes the majority of the dissolved oxygen needed for biological life.

One way to remedy the dissolved oxygen fluctuations is to install best management practices (BMPs) on your farm. Practicing BMPs can reduce the amount of water runoff from fields and reduce the amount of nutrients that can enter the Arroyo Colorado in runoff. There are multiple cost-share programs available to agricultural producers to install BMPs on your farm. Technical assistance is also available to

assess current production practices and management of your resources including water, nutrients, soil, and pesticides. Participation in a cost-share program or adoption of a water quality management plan for your farm will improve production, likely reduce costs, and at the same time protect local water quality.

To learn more about these best management practices and cost share programs, contact your

Texas AgriLife County Extension Agent or your local Natural Resource Conservation Service (NRCS) or the Regional Texas State Soil and Water Board (TSSWCB) office. See contact information below. To read more about the Arroyo Colorado Watershed, visit <http://arroyocolorado.org/>.

AgriLife County Extension Agent Contact:		
Hidalgo County	Brad Cowan	956.383.1026
Cameron County	Enrique Perez	956.361.8236
Willacy County	Lucas Garcia	956.689.2412
TSSWCB Contact:		
Harlingen Office	Ronnie Ramirez	956.421.5841
NRCS Contact:		
San Benito Center		956.399.2522
Edinburg Center		956.383.3002