



Characterizing the Kickapoo Creek in Henderson County Watershed

Project Introduction

Texas Institute for Applied Environmental Research
Stephenville, Texas

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Project Partners

- Texas State Soil and Water Conservation Board (TSSWCB)
- Texas Institute for Applied Environmental Research (TIAER)
- Angelina & Neches River Authority

Federal Clean Water Act

- Requires States to establish Water Quality Standards to achieve objective & goals
- Requires States to identify waterbodies failing to meet water quality standards & not supporting their designated uses
 - this list of impaired waterbodies is known as the *Texas 303(d) List*, developed by TCEQ

Why we are here

Bacteria Impairment

- Kickapoo Creek is not meeting the water quality standard for primary contact recreation
 - Due to elevated levels of bacteria, *E. coli*.
 - Depressed dissolved oxygen impairment is classified as 5c – indicating that additional data or information needed
- TIAER performed a Recreational Use Attainability Analysis on Kickapoo Creek in 2014



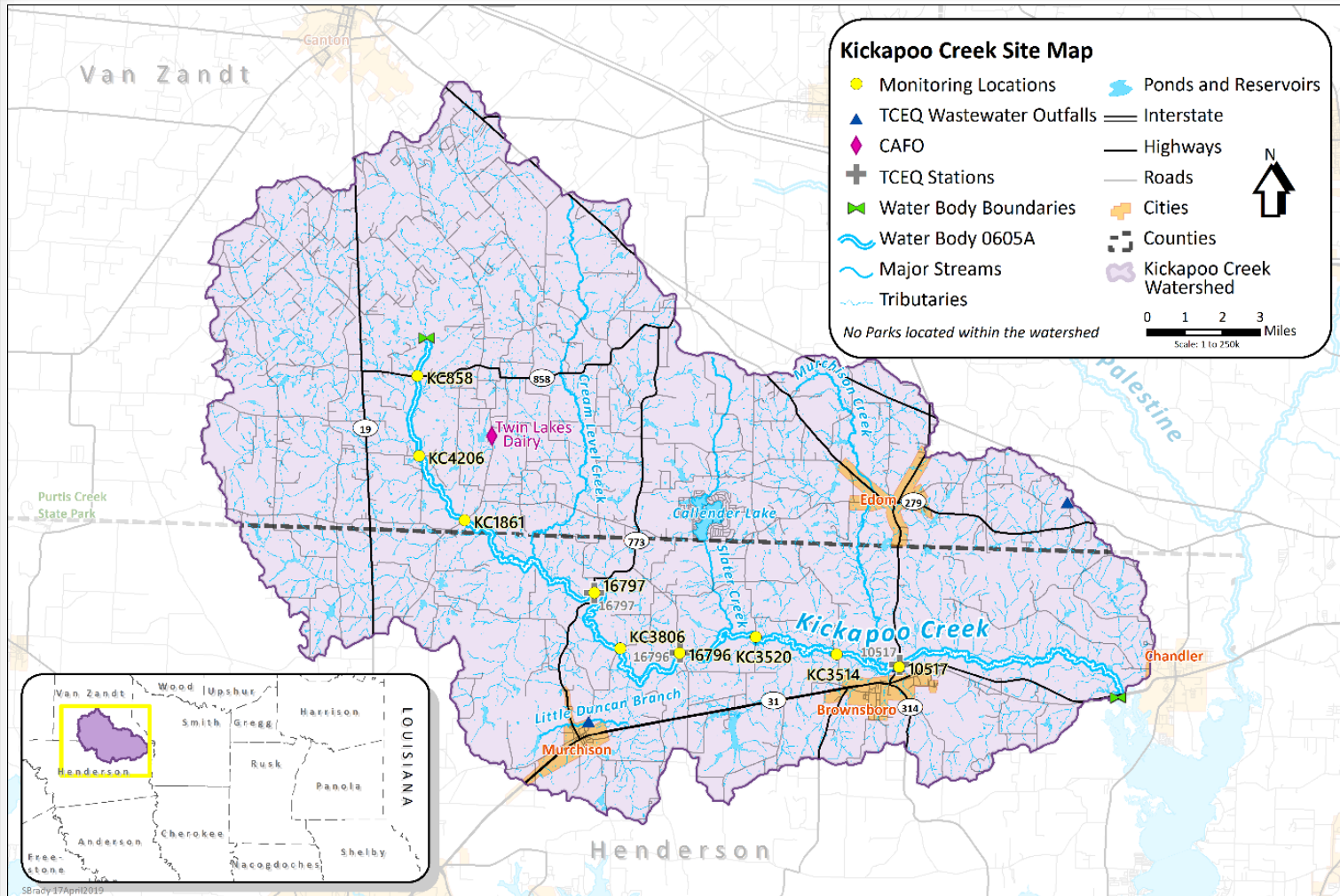
Purpose

- To better assess Kickapoo Creek and identify potential causes and sources of pollution, additional water quality monitoring and data inventory are needed
- Stakeholder involvement and understanding of water quality is needed to determine the best route for dealing with impairments in the watershed

Plan of Action

- Routine monitoring (monthly) at 9 sites on Kickapoo Creek
 - $\text{NH}_3\text{-N}$, TSS, VSS, $\text{NO}_2\text{-N} + \text{NO}_3\text{-N}$, TKN, $\text{PO}_4\text{-P}$, TP, BOD, and CHLA
- Conduct 24-hr DO monitoring (in conjunction with routine monthly) at 3 locations

Kickapoo Creek in Henderson County



Routine Monitoring Locations

Kickapoo Creek

Site ID	Site Description	Latitude	Longitude
10517	Kickapoo Creek crossing at FM 314 in Henderson County*	32.309099	-95.605826
KC3514	Kickapoo Creek crossing at Henderson CR 3514 in Henderson County	32.309099	-95.605826
KC3520	Kickapoo Creek crossing at Henderson CR 3520 in Henderson County	32.319451	-95.67152
16796	Kickapoo Creek crossing at FM1803 in Henderson County	32.312309	-95.705716
KC3806	Kickapoo Creek crossing at Henderson CR 3806 in Henderson County*	32.313565	-95.732693
KC16797	Kickapoo Creek crossing at FM 773 Henderson County	32.334668	-95.745165
KC1861	Kickapoo Creek crossing at 1861 in Van Zandt County	32.361167	-95.805017
KC4206	Kickapoo Creek crossing at CR 4206 in Van Zandt County*	32.385408	-95.826422
KC858	Kickapoo Creek crossing at FM 858 in Van Zandt County	32.416093	-95.828130

*indicate sites where TIAER will conduct 24-hour DO

Questions?

Project Website:

www.kickapoocreekwpp.com*

*webpage still in development

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