



Tarleton State University
A member of The Texas A&M University System



Dixon Creek

Recreational Use Attainability Analysis Summary of Findings

Texas Institute for Applied Environmental Research
Stephenville, Texas



June 12, 2014



Project Partners

- Texas State Soil and Water Conservation Board (TSSWCB)
- Texas Institute for Applied Environmental Research (TIAER)



TSSWCB

- Provide state oversight
- Management and coordination of project activities
 - Project partners
 - Texas Commission on Environmental Quality (TCEQ)
- Provide project funding



TIAER

- Project administration
- Develop & maintain stakeholder relations
- Perform RUAA survey activities
- GIS inventory
- Facilitate meetings
- Develop final technical reports



Why we are here

- Texas 303 (d) List of Impaired Water bodies
 - Developed by TCEQ to summarize the condition of the state's surface waters, including concerns for public health, fitness for use by aquatic species and other wildlife, and specific pollutants and their possible sources.



Bacteria Impairment

- Dixon Creek is not meeting the water quality standard for primary contact recreation
 - Due to elevated levels of bacteria, *E. coli*.
 - Requires action to meet the standards that are set by the State of Texas and EPA.
 - Geometric mean should not exceed 126 cfu/ 100ml

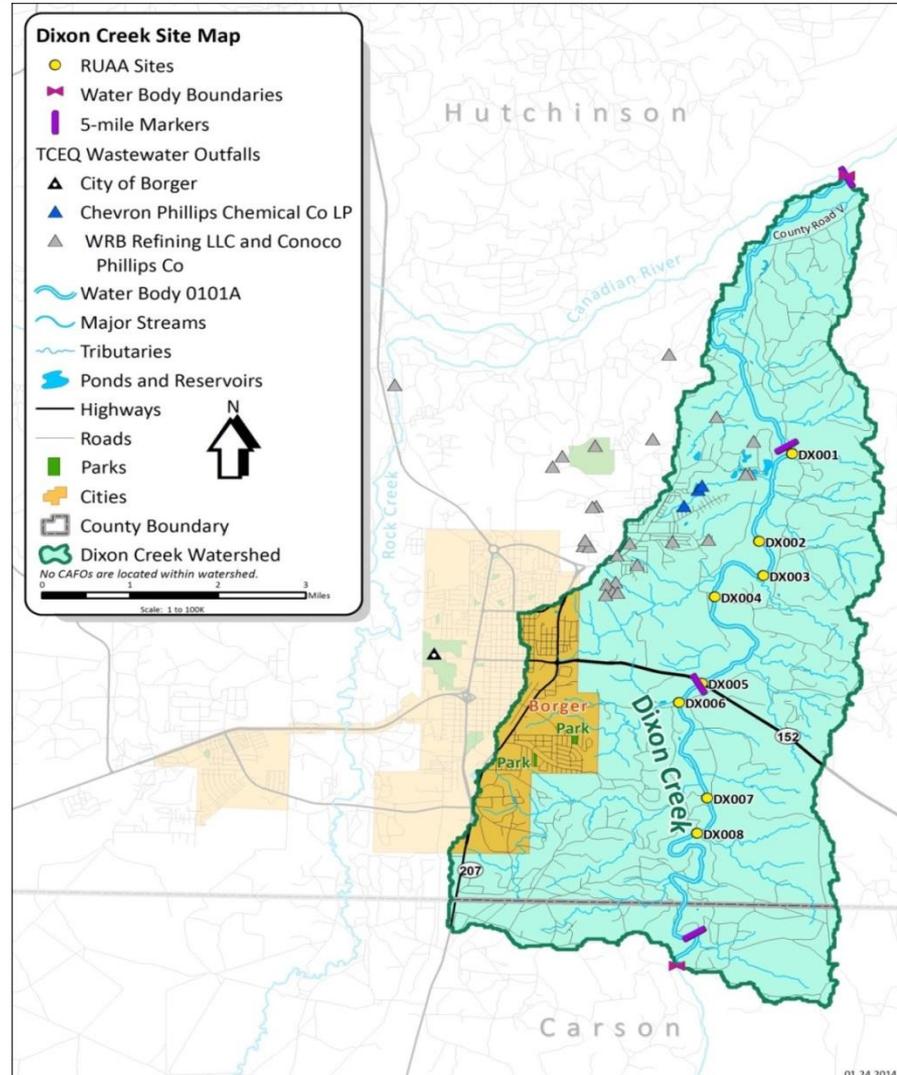


Impaired Stream Segments

- Dixon Creek (0101A)
 - 2000 Texas Water Quality 303(d) List
 - Bacteria
 - Current Geometric mean = 306 cfu/ 100mL



Dixon Creek Site Map



Description and Location of RUAA Field Survey Sites

TCEQ ID	Site ID	Site Description	Latitude	Longitude	Distance from Previous Site (mi)	Distance from Confluence (mi)	Distance from Upper Reach (mi)	Access
	DX001	Dixon Creek 4.84 river miles north of Hwy 152	35.706302	-101.3343	-	5.12	9.99	Private
	DX002	Dixon Creek 3.46 river miles north of Hwy 152	35.690383	-101.340472	1.38	6.50	8.61	Private
	DX003	Dixon Creek 2.86 river miles north of Hwy 152	35.684227	-101.339494	0.60	7.10	8.01	Private
	DX004	Dixon Creek 1.95 river miles north of Hwy 152	35.680161	-101.34921	0.91	8.01	7.10	Private
17045	DX005	Dixon Creek at SH 152, west of FM 2171, East of Borger	35.664585	-101.35132	1.95	9.96	5.15	Public*
	DX006	Dixon Creek 0.36 river miles south of Hwy 152	35.661016	-101.355854	0.36	10.32	4.79	Private
	DX007	Dixon Creek 1.87 river miles south of SH 152	35.643897	-101.349651	1.39	11.71	3.40	Private
	DX008	Dixon Creek 2.41 river miles south of SH 152	35.637501	-101.351495	0.58	12.29	2.82	Private



*indicates that the site was publically accessible at a road crossing but that further access was limited by fencing of private property.

¹ Distances were digitally estimated using the measuring tool in ArcGIS 9.3 with the 2010 NAIP –m DOQQs and the NHD layer as a reference guide.



Purpose of RUAA

- Collect information that will:
 1. Confirm or deny primary contact recreation
 2. Provide evidence to support a change in recreational use category of Dixon Creek
- Recreational Use Categories:
 1. Primary Contact Recreation
 2. Secondary Contact Recreation 1
 3. Secondary Contact Recreation 2
 4. Noncontact Recreation



Survey Dates for Dixon Creek

- First RUAA Survey
 - Conducted May 25 - 28, 2013
- Second RUAA Survey
 - Conducted July 27 - 30, 2013



Findings for First RUAA Survey

- Conducted May 25th – 28th
- Summary
 - Limited water for recreation
 - No direct recreation observed
 - Limited public access, mostly private property



Dixon Creek Photographs



Upstream at DX003



Downstream at DX003



Dixon Creek Photographs



Cattle Tracks at DX004



Upstream at DX004



Dixon Creek Photographs



Obstruction at DX006



Child's Ball at DX005



Dixon Creek Photographs



Left Bank at DX007



Oil Pipe Line at DX007



Dixon Creek Photographs



Dog Tracks at DX008



Oil Pipe Line at DX008

Findings for Second RUUA Survey

- Conducted July 27th -30th
- Summary
 - Limited water for recreation
 - No direct recreation observed
 - Limited public access, mostly private property



Dixon Creek Photographs



Upstream at DX001



Thick Vegetation at DX001



Dixon Creek Photographs



Upstream at DX002



Downstream at DX002



Dixon Creek Photographs



Downstream at DX004



Upstream at DX004



Dixon Creek Photographs



Upstream at DX006



Downstream at DX006



Dixon Creek Photographs



Upstream at DX008



Downstream at DX008

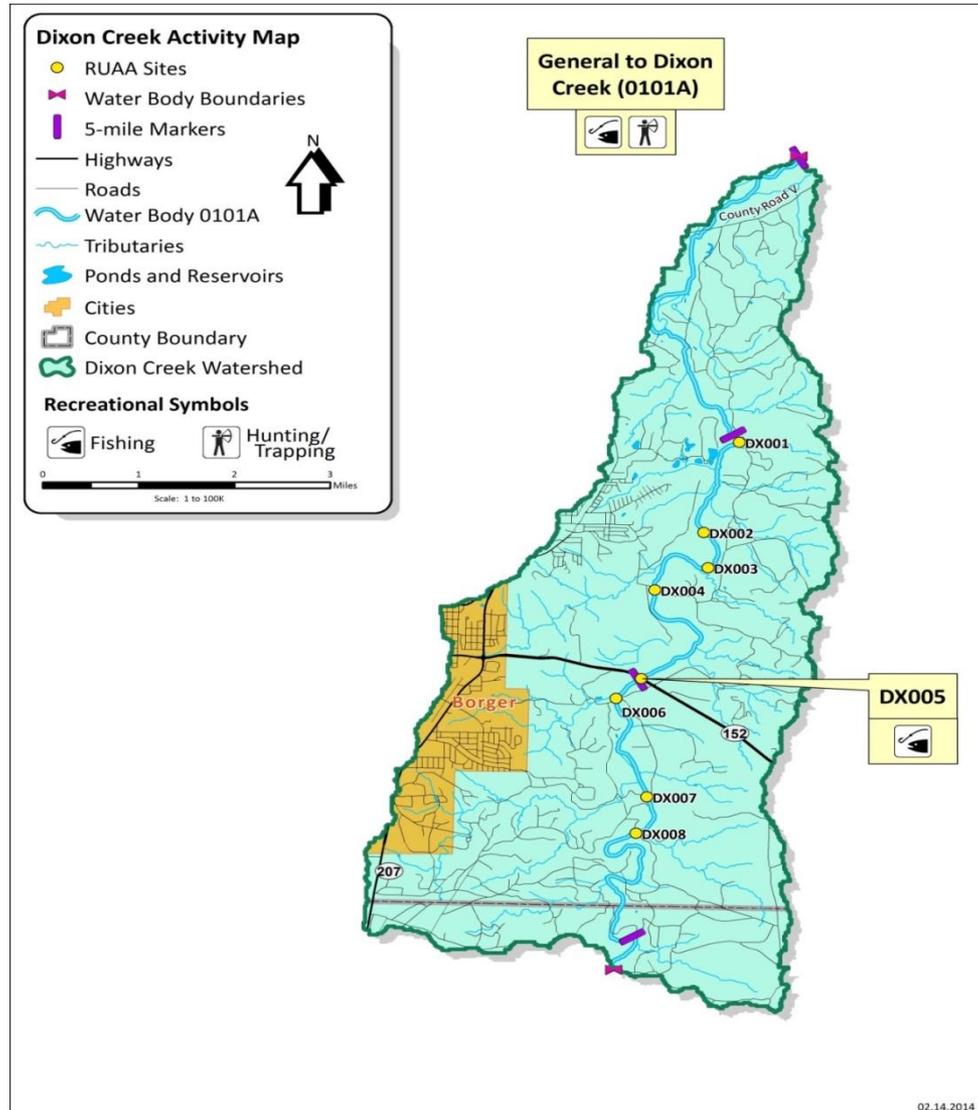


Summary of Activity

Site Name	Swimming	Adult Wading	Children Wading	Hunting	Fishing	Boating, Canoeing, Kayaking
DX001	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0	0,0,0
DX002						
DX003						
DX004						
DX005 ^a	0,0,0	0,0,0	0,0,0	0,0,0	0,1,1	0,0,0
DX006						
DX007						
DX008						
General AU	0,0,0	0,0,0	0,0,0	1,1,0	0,1,0	0,0,0
Totals	0,0,0	0,0,0	0,0,0	1,1,0	0,2,1	0,0,0



Dixon Creek Activity Map



Next Steps

- Public Comment Period
 - **Open from June 12– July 12, 2014**
 - Please take this opportunity to review the Canadian River RUAA Report
 - Provide Comments
 - Report can be viewed:
<https://www.tsswcb.texas.gov/en/managementprogram/ruaadixon>



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Questions?

Project Website:

<https://www.tsswcb.texas.gov/en/managementprogram/ruaadixon>

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