

Buck Creek Watershed Partnership

February 2009 Newsletter

Next Stakeholder Meeting April 30, 2009 @ 6:30 p.m. in Wellington at the Club Room of the Wellington Auditorium, 802 10th Street

Sample Collection & Analysis Update

Work since our October 23, 2008 stakeholder meeting has consisted mainly of water and fecal material collection. Favorable rains this fall and early winter have allowed three more sample sets to be collected following significant rainfalls. This brings the total number of rainfall event samples up to five; hopefully we will be able to collect three more prior to the end of the project. A large amount of work has been done to prepare fecal and water samples for bacterial source tracking. A shipment containing over 300 unknown samples and known-source *E. coli* isolates was sent to AgriLife-El Paso on January 13, 2009. These samples will be evaluated to determine what species of animal the isolated bacteria came from. We will provide an update of this information at the next meeting.

Watershed Protection Plan Update

Work on the Watershed Protection Plan (WPP) continues. Background information about the watershed's current and historical uses and water quality, as well as potential sources of bacteria impairment have all been included in the WPP thus far. Expect drafted text to be presented to stakeholders at the next meeting.

A brief overview of potential management practices (used to manage bacteria loads from human, livestock, and wildlife sources) was given at the last stakeholder meeting for possible inclusion in the WPP. Stakeholders present at the meeting were asked to complete a survey on conservation practices to determine if they would consider implementing such practices on their respective properties. The majority of the conservation practices discussed are included in the "USDA-NRCS Field Office Technical Guide" for Childress, Collingsworth and Donley Counties, however livestock shade structures and soil testing are not NRCS approved practices, although they have been used with measured success in other areas of the state. The results of the survey are presented in the Management Practice Survey table.

Management Practice Survey

Practice	Yes	No
Brush Management	13	0
Conservation Cover / Conservation Reserve Program	11	2
Contour Farming	8	5
Critical Area Planting	12	1
Early Succession Habitat Development	7	6
Fencing (Cross Fencing)	9	4
Filter Strips	9	4
Grade Stabilization Structures	7	6
Grassed Waterways	13	0
Grazing Land Mechanical Treatment (Aeration)	4	9
Irrigation Efficiency Upgrade	7	6
Nutrient Management	10	3
Pipeline	9	4
Pond	10	3
Prescribed Burning	10	3
Prescribed Grazing	10	3
Pumping Plant on Water Well	11	2
Range / Pasture Planting	12	1
Residue Management	10	3
Restoration / Management of Declining Habitats	9	4
Riparian Forest Buffer	8	5
Riparian Herbaceous Cover	10	3
Roof Runoff Structures	5	8
Septic System Maintenance / Upgrade	9	4
Livestock Shade Structures	11	2
Soil Testing	11	2
Stream Crossing	8	5
Strip Cropping	8	5
Terraces	10	3
Upland Wildlife Habitat Management	9	4
Vegetative Barrier	7	6
Water Well	12	1
Watering Facility	10	3
Wetland Wildlife Habitat Management	9	4
Wildlife Watering Facility	9	4

How to Deal with Road Kill

At the last stakeholder meeting, the topic of road kill and what can be done to remove it from state maintained roads came up. We contacted the regional Texas Department of Transportation (TXDOT) office in Childress and asked them what the stakeholders could do to get road kill removed from the right-of-way, especially near the creek. The Director of Operations at the Childress office said that TXDOT is responsible for removing and properly disposing of dead animal remains in the right-of-way. The typical practice employed by TXDOT is to remove the animal from the roadway by dragging it to the edge of the right-of-way where it stays until TXDOT can come and completely remove the animal.

As landowners and watershed residents, you can notify TXDOT when animals are killed and remain in the roadway or right-of-way. This is especially important as animal carcasses close to the creek will likely have a greater influence on bacteria levels in the creek than those miles away from the creek. To contact the local TXDOT offices, call the numbers below Monday through Friday during normal business hours.

Local TX DOT Contact Info

Childress Office	940-937-7249
Clarendon Office	806-874-3721
Wellington Office	806-447-2971

Water Quality

We continue to collect and analyze water samples from Buck Creek. The table below shows *E. coli* and nitrate levels recorded in the creek from November 2007 through January 2009. The calculated geometric means only include samples listed here and are well below the geometric mean of 126 cfu/100 mL from the Texas Surface Water Quality Standards. The screening level for nitrates is 1.95 mg/L. Data from continued water

sampling will be submitted to Texas Commission on Environmental Quality for future water body assessments.

Sample Site : *E. coli* Data...cfu/100ml

Date Collected	3	5	10A	10C	11
11/7/2007	NF	127	133	64	87
12/5/2007	NF	70	29	14	4
12/13/2007	750	73	99	17	98
12/19/2007	19	143	27	8	13
1/30/2008	20	17	10	54	20
2/13/2008	4	41	154	42	12
3/19/2008	13	57	37	14	29
5/5/2008	68	86	44	58	62
5/8/2008	138	62	307	47	9
6/30/2008	23	NF	79	7	20
9/14/2008	29	87	61	47	65
10/7/2008	51	346	294	203	270
10/16/2008	15	58	48	223	355
10/27/2008	1	39	4	7	25
11/11/2008	1	17	NSC	NSC	5
12/2/2008	0.5	29	2	1	0.5
12/8/2008	1	54	26	0.5	1
1/12/2009	0.5	68	72	77	10
Geometric Mean	10.4	61.3	43.8	21.4	19.3

Sample Site : Nitrates Data...mg/L

Date Collected	3	5	10A	10C	11
11/7/2007	NF	2.82	NSC	NSC	NSC
12/5/2007	NF	0.98	4.8	4.7	3.97
12/13/2007	NSC	NSC	5	4.73	4.57
12/19/2007	<0.2	1.39	5	4.73	4.57
6/30/2008	0.29	NF	3.86	2.56	2.63
8/11/2008	NSC	NSC	4.31	3	NSC

Italics indicate samples collected after a rain event

NF = no flow

NSC = No sample collected

Visit the project website at <http://twri.tamu.edu/buckcreek/>

Please report dead animals to Phyllis: 940-414-0195

Contact Information

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