

**Texas Institute for Applied Environmental Research: Assessment of Water Quality and Watershed Based Planning for Nolan Creek/South Nolan Creek (58-13-30061)**  
**Progress Report:** FY 2014 Quarter 1 covering September 1, 2013 – November 30, 2013 (submitted December 13, 2013)

TASK	DELIVERABLE	DUE DATE	DATE SUBMITTED
<b>Contract Executed September 18, 2012</b>			
1.2	Quarterly Progress Report FY13 Q-1 No. 1 Quarterly Progress Report FY13 Q-2 No. 2 Quarterly Progress Report FY13 Q-3 No. 3 Quarterly Progress Report FY13 Q-4 No. 4 Quarterly Progress Report FY14 Q-1 No. 5 Quarterly Progress Report FY14 Q-2 No. 6 Quarterly Progress Report FY14 Q-3 No. 7 Quarterly Progress Report FY14 Q-4 No. 8 Quarterly Progress Report FY15 Q-1 No. 9 Quarterly Progress Report FY15 Q-2 No. 10 Quarterly Progress Report FY15 Q-3 No. 11 Quarterly Progress Report FY15 Q-3 No. 12	Dec. 15, 2012 Mar. 15, 2013 Jun. 15, 2013 Sep. 15, 2013 Dec. 15, 2013 Mar. 15, 2014 Jun. 15, 2014 Sep. 15, 2014 Dec. 15, 2014 Mar. 15, 2015 Jun. 15, 2015 Sep. 15, 2015	December 14, 2012 March 15, 2013 June 14, 2013 Sept. 13, 2013 Dec. 13, 2013
1.3	Contract Communication Post-Award Meeting Post Award Meeting Minutes  Quarterly Communication Minutes	Oct., 18, 2012 Dec. 15, 2012  Quarterly with QPR	Held Sep. 21, 2012 at TCEQ Offices in Austin  Oct. 30 – Partners Coordination Meeting to discuss Dec. 5 Public Meeting and to coordinate upcoming draft report deadlines. (Minutes Attachment 1)
1.4	Annual Report Article FY13 Annual Report Article FY14 Annual Report Article FY15	Upon Request Upon Request Upon Request	
1.5	Project Coordination Meeting with EPA	Sep 30, 2014	
2.1	QAPP Planning Meeting with City of Killeen	Oct. 18, 2012	Feb. 11, 2013 TIAER met with CoK in Killeen to discuss the QAPP and Monitoring plan drafts.
2.2	Draft QAPP for Monitoring	Nov. 16, 2013	Feb. 22, 2013 - A draft Monitoring QAPP was sent to the TCEQ Project Manager for review. Received comments March 28 and responded with final revision dated April 17, 2013 and QAPP approved May 2, 2013

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2.3	Draft QAPP for Modeling	Nov. 16, 2013	Feb. 22, 2013 – A draft Modeling QAPP was sent to the TCEQ Project Manager for review. Received comment April 4 and responded with final revision dated May 13, 2013 approved May 16, 2013.
2.4	QAPP Updates FY13 FY14	No less that 60 days prior to end of effective period	No Activity This Quarter
2.5	QAPP Amendments Draft  QAPP Amendments Final	As needed  As needed	
2.6	Data Submittals (quarterly data submittals requested by TCEQ PM)	Mar. 15, 2013 Jun. 15, 2013 Sep. 15, 2013 Dec. 15, 2013 Mar. 15, 2014 Jun. 15, 2014 Sep. 15, 2014 Dec. 15, 2014 Mar. 15, 2015 Jun. 15, 2015 Aug. 15, 2015	Data collection started in May 2013 with approval of monitoring QAPP. First data submittal sent Sep. 13, 2013.
3.1	Draft PPP  Final PPP	Dec. 15, 2012  Mar. 15, 2013	Feb. 25, 2013 – Submitted to TCEQ PM Mar. 4, 2013 – PPP approved by TCEQ PM.  Mar. 5, 2013 – Distributed final PPP in PDF form to project partners and TCEQ PM
3.2 – 3.5	Stakeholder Group Development, Activities, Meetings and Project Dissemination	Quarterly	Sept 5 – Public Mtg held in Harker Heights (Attachment 2: Sign In Sheets) Sept. 13 – Stream Team Training held in Killeen, TX Sept. 19 – TWS Training held in Killeen, TX (Attachment 3: Sign In Sheets)
3.6	Draft Building Partnerships – Element E, Part A Report  Final Building Partner ships – Element E, Part A Report	Mar. 15 & Sep. 15, 2013 & 2014  Aug. 15, 2015	March 4, 2013 – TCEQ PM gave final approval of PPP and approved document was sent in PDF form to project partners.

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<b>TASK</b>	<b>DELIVERABLE</b>	<b>DUE DATE</b>	<b>DATE SUBMITTED</b>
4.1-4.2	Inventory of existing data and GIS representation for watershed in shapefile or ArcGIS grid format	Nov. 15, 2013	
4.3	Draft Watershed Characterization Report	Dec. 15, 2013	
	Final Watershed Characterization Report	March 15, 2014	
5.2	Draft Water Quality Monitoring Plan	Nov. 16, 2012	Reconnaissance and planning meeting held between TIAER and CoK January 18, 2013
	Final Water Quality Monitoring Plan	Dec. 15, 2012	Submitted to TCEQ PM for review February 22, 2013 and approved March 8, 2013.
5.3	Source Survey Technical Report	Dec. 15, 2014	
5.5	Draft Watershed Characterization – Phase 2 Report	Apr. 15, 2015	
	Final Watershed Characterization – Phase 2 Report	Jun. 15, 2015	
6.2	Watershed maps that identify potential cause and sources of water quality problems	Jun. 15, 2015	
6.5	Draft Watershed Characterization Phase 3 Report with Loadings	June 15, 2015	
	Final Watershed Characterization Phase 3 Report with Loadings	Jul. 15, 2015	
7.1	Define Education Goals	Mar. 15, 2013	Strategies for reaching targeted audience outlined in PPP Sept 5 – Public Meeting presented ideas, developed a public information flyer and identified outreach/education opportunities for the Nolan Creek project.  Oct. 30 – Partners meeting identified the need to develop a display board and educational handouts for events coming up after Jan. 1, 2014. TIAER PM Nikki Jackson is in process of developing a draft for partners to approve after the first of the year.
7.2	Identify Target Audience	Mar. 15, 2013	Target audience identified in PPP

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<b>TASK</b>	<b>DELIVERABLE</b>	<b>DUE DATE</b>	<b>DATE SUBMITTED</b>
7.3	Design Implementation Measures	Mar. 15, 2013	A fact sheet was approved by the stakeholder group on Sept. 5, 2013 (Attachment 4). A list of upcoming events for education/outreach has been developed and materials for the events are currently being developed.
7.4	Evaluate Education and Outreach Program FY13 FY14 FY15	Sep. 15, 2013 Sep. 15, 2014 Sept. 15, 2015	In August the team decided to use number of attendees at stakeholder events and meetings as an evaluation of the education and outreach program. The website will also contain a counter to monitor number of webpage visitors. In FY' 14 we discussed developing an assessment tool to possibly distribute pre and post education program to evaluate improved awareness on watershed management topics.
7.5	Draft Information & Education Plan Report  Final Information & Education Plan Report	Jun. 15, 2015  Jul. 15, 2015	
8.1- 8.2	Draft Project Report  Final Project Report	Jul. 15, 2015  Aug. 15, 2015	

**GENERAL COMMENTS**

<b>TASK</b>	<b>COMMENTS/ACTIVITIES</b>
<b>1. Project Administration</b>	Project administrative duties occurred as needed including frequent email communication, development of quarterly progress reports and reimbursement requests. The subcontractor agreement with the City of Killeen was fully executed on January 17, 2013.
<b>2. Quality Assurance</b>	The Monitoring QAPP was approved and fully executed on May 02, 2013. The Modeling QAPP was approved and fully executed on May 16, 2013. No activity needed this quarter.
<b>3. Building Partnerships</b>	Extensive stakeholder education/outreach activities occurred during this quarter. Two training opportunities and one public meeting took place, and educational fact sheet was developed, and community events for further outreach were identified. Multiple press releases and news articles were printed during this past quarter.
<b>4. Watershed Characterization – Data Inventory</b>	Work continued throughout the quarter with regard to the data inventory. The CoK is reviewing the data prior to making it available to TIAER for other tasks.
<b>5. Watershed Characterization – Data Collection and Analysis</b>	<p>Routine monitoring was conducted monthly throughout the quarter at all 11 stations and is summarized in Table 1 at the end of the General Comments Section. To compensate for the lack of storm monitoring last quarter, two storms were monitored this quarter rather than just one as summarized in Table 2. Corrective Action Reports and Corrective Action Plans issued for project samples are presented in Table 3 with the Corrective Action Status as Table 4.</p> <p>For storm monitoring, all four storm sampling stations were installed as of July 10, 2013, but the station on Roy Reynolds Road (station 11913) was temporarily removed on August 3, 2013. Removal of station 11913 was at the request of the City of Harker Heights while erosion stabilization work is conducted on the bridge abutment. TIAER was notified on Sep. 24, 2013, that the bridge abutment project was completed and the storm sampling station at Roy Reynolds Road was reinstalled on October 10, 2013. At station 11913, a storm event monitored in September for the watershed included only a grab sample for bacteria as the sampler was not installed.</p> <p>SWQMIS station IDs were requested during the previous quarter for temporary station LB01 and LN01. These were received from TCEQ and used with data submitted this quarter (LB01 = station 21436 and LN01 = station 21437).</p>
<b>6. Identification of Causes and Sources of Pollution and Estimation of Pollutant Loads</b>	Limited activity this quarter with efforts focused on review of historical data for future use in source identification models.
<b>7. Information and Education Component</b>	Educational goals and target audience defined in PPP. TIAER is working with CoK to design implementation measures to measure effectiveness of outreach in changing behavior. As requested by a stakeholder, a fact sheet was created and Approved by the stakeholder group at the Sept. 5 public meeting in Harker Heights. A display board is being developed for

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	upcoming public events to improve outreach and education activities. The fact sheet has been included as Attachment 4.
<b>8. Project Report</b>	No activity to report

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**Table 1. Routine Monthly Monitoring for September through November 2013. Number of samples and comments, as applicable.**

Collection Date	TCEQ Station ID	Sonde	Nutrients & TSS	<i>E. coli</i>	Flow	Comments
11-Sep-13	11915	1	1	1	1	
11-Sep-13	18828	1	1	1	1	
11-Sep-13	21436	1	1	1	1	Previously temporary station LB01
11-Sep-13	18827	1	1	1	1	
11-Sep-13	21437	1	1	1	1	Previously temporary station LN01
11-Sep-13	11913	1	1	1	1	
11-Sep-13	11911	1	1	1	1	
11-Sep-13	11910	1	1	1	1	
11-Sep-13	11908	1	1	1	1	
11-Sep-13	11905	1	1	1	1	
11-Sep-13	14237	1	1	1	1	
08-Oct-13	11915	1	1	1	1	
08-Oct-13	18828	1	1	1	1	
08-Oct-13	21436	1	1	1	1	Previously temporary station LB01
08-Oct-13	18827	1	1	1	1	
08-Oct-13	21437	1	1	1	1	Previously temporary station LN01
08-Oct-13	11913	1	1	1	1	
08-Oct-13	11911	1	1	1	1	
08-Oct-13	11910	1	1	1	1	
08-Oct-13	11908	1	1	1	1	
08-Oct-13	11905	1	1	1	1	
08-Oct-13	14237	1	1	1	1	
13-Nov-13	11915	1	1	1	1	
13-Nov-13	18828	1	1	1	1	
13-Nov-13	21436	1	1	1	1	Previously temporary station LB01
13-Nov-13	18827	1	1	1	1	
13-Nov-13	21437	1	1	1	1	Previously temporary station LN01
13-Nov-13	11913	1	1	1	1	
13-Nov-13	11911	1	1	1	1	
13-Nov-13	11910	1	1	1	1	
13-Nov-13	11908	1	1	1	1	
13-Nov-13	11905	1	1	1	1	
13-Nov-13	14237	1	1	1	1	

Sonde data includes dissolved oxygen, specific conductance, pH, and water temperature.

Nutrients include nitrite-nitrogen + nitrate-nitrogen (NO<sub>2</sub>-N+NO<sub>3</sub>-N, dissolved), total Kjeldahl nitrogen (TKN), orthophosphate-phosphorus (OPO<sub>4</sub>-P, dissolved), and total phosphorus (TP).

**Table 2. Storm Monitoring for September through November 2013. Number of samples and comments, as applicable. Nutrient and TSS, unless noted, represent a flow-weighted sample collected with an automated sampler. Samples for *E. coli* are grab samples collected during elevated flow conditions.**

Collection Date	TCEQ Station ID	Nutrients & TSS	<i>E. coli</i>	Flow	Comments
21-Sep-2013	18828	1	1	1	
21-Sep-2013	11913	0	1	1	Sampler not in place, no nutrient or TSS sample collected
21-Sep-2013	11910	1	1	1	
21-Sep-2013	11905	1	1	1	
15-Oct-2013	18828	1	1	1	
15-Oct-2013	11913	1	1	1	
15-Oct-2013	11910	1	1	1	
15-Oct-2013	11905	1	1	1	Low battery, so automated sampler did not function properly, storm grab collected for nutrient and TSS analyses

Nutrients include nitrite-nitrogen + nitrate-nitrogen (NO<sub>2</sub>-N+NO<sub>3</sub>-N, dissolved), total Kjeldahl nitrogen (TKN), orthophosphate-phosphorus (OPO<sub>4</sub>-P, dissolved), and total phosphorus (TP).

**Corrective Action Reports**

The below listing includes CARs where data quality was potentially impacted and required notification and review by the TIAER PM. The deficiencies were not such to require immediate reporting to TCEQ, and are, thus, reported with the QPR.

**Table 3**  
**Summary of new Corrective Action Reports**

TIAER CAR # & CAP#	Sample Collection Date	Report Initiation Date	TIAER Sample Number(s)	Site(s)	Description of Deficiency	Cause(s)	Resulting or Suggested Action	Corrective Action for Specific Incident	Corrective Actions to be Taken	Proposed Completion Date	Date Closed
13-0173 & CAP #4	08Oct2013	16Oct2013	1000092833	11908	MS recovery for NO <sub>2</sub> -N+NO <sub>3</sub> -N 57%, lower limit 75%. Sample value 14.77 mg/L, spike recovery 15.34 mg/L and. spike level 1 mg/L.	Uncertain, complex matrix and high value relative to level of spike.	None	None	Flag data with "SR" for spike recovery outside accepted limits	16Dec2013	Not yet closed
13-0138 & CAP #4	15Oct2013	17Oct2013	1000092874	11905	MS recovery for PO <sub>4</sub> -P 129%, upper limit 125%. Sample value 0.99 mg/L, spike recovery 1.64 mg/L and spike level 0.5 mg/L.	Uncertain, complex matrix and high value relative to level of spike.	None	None	Flag data with "SR" for spike recovery outside accepted limits	16Dec2013	Not yet closed

**Table 4**  
**Corrective Action Status Table**

<b>Corrective Action # (CARs)</b>	<b>Date Issued (CAP)</b>	<b>Description of Deficiency</b>	<b>Action Taken</b>	<b>Date Closed</b>
1 (CARs 13-0092 & 13-0105)	06Sep2013	Matrix spike beyond recovery limits (NO <sub>2</sub> -N+NO <sub>3</sub> -N & TKN)	Associated sample data to be flagged with “SR” in data submittal. No specific corrective action identified. Lab will continue to monitor for trends.	01Oct2013
2 (CAR 13-0097)	06Sep2013	Quanti-Tray comparator for <i>E. coli</i> analysis was used past expiration	Expired comparator was checked against new comparator. Added comparator expiration date to monthly maintenance check schedule.	Not yet signed off on by TIAER QAO
3 (CAR 13-0101)	06Sep2013	Field filtration of NO <sub>2</sub> -N+NO <sub>3</sub> -N and PO <sub>4</sub> -P was unable to occur.	Field crew directed to use alternative parameter codes as outlined in the QAPP. Field personnel reminded to verify that loaded equipment matches the items on the equipment check list, which is located in the Nolan field notebooks.	03Sep2013
4 (CARs 13-0137 & 13-0138)	12Dec2013	Matrix spike beyond recovery limits (NO <sub>2</sub> -N+NO <sub>3</sub> -N & PO <sub>4</sub> -P)	Associated sample data to be flagged with “SR” in data submittal. No specific corrective action identified. Lab will continue to monitor for trends.	Not yet signed off on by TIAER QAO

**Attachment 1**

# minutes

<b>Partners coordination meeting – Nolan Creek Watershed</b>			
10.30.2013		9:00 am	Conference Call
Meeting called by	Nikki Jackson, Project Manager		
Type of meeting	Coordination/Update		
Facilitator	Nikki Jackson		
Note taker	Nikki Jackson		
Timekeeper			
Attendees	Kristina Ramirez, Dr. Anne McFarland, Joan Flowers, Nikki Jackson		
<b>December 5 Stakeholder Meeting</b>			
Discussion	Tiffany Morgan from BRA will present during the December 5 meeting, focusing on the impact of upcoming Nutrient requirements impact on WWTF's management. We will update on the Stream Team Volunteer Monitoring program's sampling Stations, and present monitoring data to date.		
Conclusions	Nikki is responsible for press releases and stakeholder letters. Nikki and Anne are responsible for the Power points that will be presented at the meeting. All materials will be sent to Anju in the required timeframe. Kristina will talk to Mark Hyde about securing the Harker Heights meeting location. If it is not available the City of Killeen will host the meeting.		
Action Items	Person Responsible	Deadline	
Agenda, Press Release and Letters will sent to Anju	Nikki Jackson	Nov. 7, 2013	
Power Points sent to Anju	Nikki and Anne	Nov. 21, 2013	
<b>GIS Draft Report</b>			
Discussion	The team talked about the upcoming December 15, 2013 GIS draft report deadline. Joan Flowers indicated It was currently being reviewed internally. It should be ready to send to the City of Killeen in two weeks and therefore should be Ready for on time submission to TCEQ		
Conclusions	The GIS draft report associated with Task 4 should be ready for on-time submission to Anju at TCEQ		
Action Items	Person Responsible	Deadline	
Submit GIS Draft Report to Nikki Jackson prior to deadline	Joan Flowers/Kristina	Dec. 15, 2013	
<b>Participation in Community Activities</b>			
Discussion	Should the group be involved in community activities to increase participation and awareness of the Watershed project through the end of the 2013 year?		
Conclusions	Yes. Nikki will submit a list of upcoming activities in the watershed through January 1, 2014 for the group To review and make recommendations on. The group will work to establish content for a booth at chosen activities. The City of Killeen volunteered to help with giveaways, copies and handouts when activities occurred within their city limits.		
Action Items	Person Responsible	Deadline	
Update Stakeholder information sheet with new upcoming activities	Nikki Jackson	Nov. 2, 2013	
Secure booth space at activities and plan staffing needs through December 5 meeting	Nikki Jackson	Nov. 2, 2013	

Attachment 2

<u>Name</u>	<u>Email</u>	<u>Agency</u>
Marilyn Whitworth	wrm637@hotmail.com	Central TX Master Naturalist
Vanessa Lynch	VLKdtkneuse@gmail.com	Harker Heights local
Kenneth G. Schaefer	RITA.Schaefer@yahoo.com	T.S.C.W
Ursula Vance	uvance@hot-rr.com	CT Master Naturalist
Wayne Deane		
Janel Lee	Jans1342@aol.com	Harker Heights Evening Star
Robert Ozment	robert.ozment@TCEQ.TX.US	TCEQ-Was
Michael Canova	mcanova@usgs.gov	USGS
Pamela Casebolt	pcasebolt@tssweb.texas.gov	TSSWCF
Leslie Wright		
Kyle Wright	kyle.wright@txada.gov	WRCS
Susan Baggett	sbaggett@hotmail.com	citizen/Belton
MICHAEL JAHNS	mjahns@bellcountyhealth.org	BCPHC
Scott Brooks	scott@yalgoengineering.com	Yalgo
Todd Strait	todd.strait@clearwaterdistrict.org	Clearwater District
Joe Hines	jhines@ci.harker-heights.tx.us	Harker Heights
Karen Hines		Citizen
James Scholz	jscholz@ci.harker-heights.tx.us	citizen
Paul Murray	PMurray@ci.harker-heights.tx.us	City of Harker Heights
Fred J Mings		WCI06
Glen Graydy	wci06e@yahoo.com	WCI06
Peter Dillo	pdillo@killeentexas.gov	
Paul W. Ducre	Paul.Ducre@killeenisd.org	Killeen ISD
Alan Harris	aharris@belton-texas.gov	Belton
Paul Roman	proman@belton-texas.gov	Belton
BILL LEE	blee15@hotmail.com	FPI
Michael ...	...	...

Attachment #3

Texas Watershed Steward Training

Thursday, September 19, 2013

Nolan Creek: Killeen, TX



General Participant Sign-In Sheet

	Name	Address	City	Zip Code	Email	Pre-Registered	
						YES	NO
1.	Mark Mahler	353 Claremont Drive	Belton	76513	markmahler@gmail.com	✓	
2.	Jeri Gawn	332 N. Pearl	Belton	76513	G16EM1996@hotmail.com	✓	
3.	Todd Strait						✓
4.	Diana Horvath	602 N. Main St.	Belton	76513	diana.horvath@co.killeen.tx.us	✓	
5.	Kristina Ramirez	PO Box 1329	Killeen	76540	K Ramirez@killeentexas.gov	✓	
6.	Bill Rodgers	307 West Ave J	Belton	76513	abram@jst46@gmail.com		
7.	Isabel Garcia	P.O. Box 1329	Killeen	76540	lgarcia@killeentexas.gov	✓	
8.	Tilda Chambers	2308 Sherman Dr	Killeen	76543	tildac@msn.com	✓	

Texas Watershed Steward Training

Thursday, September 19, 2013

Nolan Creek: Killeen, TX



General Participant Sign-In Sheet

	Name	Address	City	Zip Code	Email	Pre-Registered	
						YES	NO
1.	Wayne Duncan	499 Tower Hill Ln	Killeen	76542			✓
2.	Jason Deckman	2180 N. Main St CT09	Belton	76513	jason.deckman@ct09.org	✓	
3.	Alca Butler	4200 Smith Subard Rd.	Austin	78744	alca.butler@epa.gov	✓	
4.	Kenn Prince	800 Backstrom Crossing	Belton	76513	kprince@TRCA@Gmail.com	✓	
5.	Allen Nash	215 N. Main St.	Temple	76501	anash@clark-fuller.com	✓	
6.	Kenneth G. Schwan	1937 SLAWSON LA	Killeen	76542	RITA.Schwana@killeen.tx.us	✓	
7.	Alexandra Smith	1200 Park 35 Circle	Austin	78753	alexandra.smith@trca.org	✓	
8.	Sarah Eagle	"	"	"	Sarah.Eagle@trca.org		✓
9.	Frank Northam	3949 ELAN GARDEN	Belton	76513	NONE		✓
10.	MICHELLE LEE	2901 E STAN SCHLUETER	KILLEEN	76542	mlee@kestbd.com	✓	
11.	Johnson Noel	1305 Obvantz 108	Belton	76513	chaydawn_noe1@jst46.org	✓	
12.	Virginia Sanders	420 N. Main St	Temple	76501	Virginia.B.Sanders@usfda.gov	✓	
13.	Michael Jahns	410 Cottingham	Temple	76501	mjahns@bellcountypd.com		
14.	KERZ ZOLLER	2 CLIFFHOUSE DR.	Belton	76513			
15.	Mikki Jackson	Box T-0410	Stville	76401	micki.jackson@tiar.tdcltexas.gov		✓

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**Texas Department of Agriculture**



**Pesticide CEU Training  
 Texas Department of Agriculture Attendance Form**

**Sponsor:** Texas A&M AgriLife Extension Service, Department of Soil & Crop Sciences

**Course Date:** September 19, 2013

**CEU # 8027 Number of Credit Hours:** 3 General, Total 3

**Training Location:** Texas A&M-Central Texas, Killeen, TX

**Topics:** Overview of Watershed Systems (Watershed Hydrology, Natural Watershed Features and Functions)  
 Overview of Watershed Impairments (Water Quantity and Quality, Water Quality Law and Policy, Water Quality Monitoring)  
 Managing to Improve Watershed Function (Watershed Approach, Urban/Ag BMPs)  
 Community-Driven Watershed Protection and Management

Name (Please Print)	Pesticide License #	Mailing Address, City, Zip Code	Telephone
1. DENNIS M. HERBERT	0692100	1986 Rita Bend DR., SALADO, TX 76571	254-947-8633
2. Allison Colwick	0404093	2609 Julianne Belton TX	254-939-1516
3. MIGUEL A. LABOY	0583148	5031 SPARTA Rd, Belton, TX	254-421-0578
4. JOHN FULWILGER	0500167	2608 N. WYATT S-310 BELTON	254-933-2775
5. Henry Mayer Jr.	0520067	1049 E. Timberline Rd. Killeen 76542	254 368 0389
6.			

**Texas Watershed Steward Training**

Thursday, September 19, 2013  
 Nolan Creek: Killeen, TX

**CPE Provider:** Texas A&M – College Station, Extension Soil & Crop Sciences  
**Total Credits:** 7.00  
**Subject:** Professional Engineer



**TBPE CEP (Professional Engineer) Sign-In Sheet**

	Name	Address	City	Zip Code	Email	Pre-Registered	
						YES	NO
1.	Allan Colwick	2609 Julianne	Belton	76573	acolwick@hotmail.com		X
2.							

**Texas Watershed Steward Training**

Thursday, September 19, 2013  
 Nolan Creek: Killeen, TX

**CM Provider:** Texas AgriLife Extension Service  
**Total Credits:** 7.00 (1.5 CM Law, 5.5 CM)  
**Subject:** Certified Planner



**AICP CM (Certification Maintenance) Sign-In Sheet**

	Name	Address	City	Zip Code	Email	Pre-Registered	
						YES	NO
1.	Cheryl Maxwell	311 Greenbriar St	Belton	76573	cmaxwell@texasag.com	✓	
2.							
3.							

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Thursday, September 19, 2013  
 Nolan Creek: Killeen, TX

CEU ID#: 02804  
 CEU Sponsor: Texas AgriLife Extension Service  
 Total Credits: 7.00  
 Subject: Soil & Water Mgmt.



**CCA CEU Sign-In Sheet**

	Name	Address	City	Zip Code	Email	CCA Cert. #	Pre-Registered	
							YES	NO
1.	Amy Chalise	15430 Ecker's Drive	Austin	78728	amychalise@texasagrillife.com		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.	Bernadette Davis	TCEQ Bldg. 7	Austin		bernadette.davis@texasagrillife.com		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.	<del>MARIELE DE</del>							
4.								

Attachment #4

# Assessment of Water Quality & Watershed Based Planning for Nolan Creek



## Why Nolan Creek?

Portions of Nolan Creek/South Nolan Creek currently do not support its designated uses and needs improving. Cleaner water allows for recreational use such as swimming, fishing, wading, and canoeing. Recreational use of Nolan Creek/South Nolan Creek promotes a stronger economy and healthier lifestyle for area residents.

## Here's How YOU can get involved!

### Upcoming Events

Sept. 5: Stakeholder Meeting

Oct.5: Barktoberfest

### Upcoming Training Opportunities

Sept. 19: Texas Watershed Stewards Workshop

### Community Involvement

Nolan Creek Recreational Improvement Project

More Information: <http://www.beltontexas.gov/index.aspx?nid=360>

Goals for Nolan Creek  
To restore good water quality throughout Nolan Creek/South Nolan Creek Watershed and to involve and educate residents on healthy water conservation of their watershed.

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