

**Texas AgriLife Research
Texas Water Resources Institute**

**Preventing Water Quality Contamination Through the Texas Well Owner Network
FY 10 CWA 319(h)
TSSWCB Project No. 10-04**

Quarter no. 2 From 01-01-11 through 03-31-11 .

I. Abstract

The Preventing Water Quality Contamination through the Texas Well Owner Network project was approved, with a start date of November 1, 2010. The Coordinator position was advertised; a candidate was identified, interviewed and offered the position. When the Coordinator begins work next quarter, a coordination meeting will be held, TWON logo finalized and website published to internet.

II. Overall Progress and Results by Task

TASK 1: Project Administration

Subtask 1.1: *TWRI will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be submitted by the 15th of January, April, July and October. QPRs shall be distributed to all project partners.*

The following actions have been completed during this reporting period:

- A. TWRI submitted the 1st Quarter, Year 1 report to TSSWCB on January 14, 2011.

8% Complete

Subtask 1.2: *TWRI will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.*

The following actions have been completed during this reporting period:

- a. Subaccounts have been set up and partners notified.

5% Complete

Subtask 1.3: *TWRI will host coordination meetings, conference calls, or TTVN meetings, as appropriate, with project partners in order to efficiently and effectively achieve project goals, coordinate efforts and summarize activities and achievements made throughout the course of this project. TWRI will develop lists of action items needed following each project coordination meeting and distribute to project personnel.*

The following actions have been completed during this reporting period:

- a. Project kickoff meeting was held on January 21, 2011. In attendance were
- Dianne Boellstorff, SCSC
 - Brent Clayton, BAEN
 - Ryan Gerhlic, BAEN

- Justin Mechell, BAEN
- Mark McFarland, SCSC
- Brian VanDelist, TWRI
- Kevin Wagner, TWRI
- Loren Warrick, TSSWCB
- Aaron Wendt, TSSWCB

3% Complete

Subtask 1.4: *TWRI and SCSC will attend and participate in the Texas Groundwater Protection Committee and subcommittee meetings, Texas Alliance of Groundwater Districts conferences, and other meetings as appropriate in order to communicate project goals, activities and achievements accomplishments to affected parties.*

The following actions have been completed during this reporting period:

- a. SCSC attended TQPC meeting and discussed project.

8% Complete

Subtask 1.5: *TWRI in collaboration with SCSC, will create (Months 1-3), host and maintain (Months 4-36) a website to serve as a clearinghouse for TWON information and resources including updated and renamed, web-adapted Tex*A*Syst educational materials and online delivery of TWON.*

The following actions have been completed during this reporting period:

- a. Content developed, which will be posted next quarter.

1% Complete

Subtask 1.6: *TWRI and SCSC will develop a project final report.*

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

TASK 2: Development of TWON Educational Materials/Curriculum

Subtask 2.1: *SCSC will employ a TWON Coordinator to develop and deliver the TWON curriculum in selected watersheds.*

The following actions have been completed during this reporting period:

- a. A superior candidate was interviewed February 17 and presented material that they had developed for Arizona's well owner program.
- b. Dr. Boellstorf extended an offer of employment to previously mentioned candidate with a tentative start date of May 9.

50% Complete

*Subtask 2.2: Update and rename existing TEX*A*Syst documents to reflect changes/improvements in laws and regulations and private well management, maintenance and protection. Revisions will be developed by the TWON Coordinator, with significant assistance from Project Co-Leads and the BAEN Program Specialist. Existing publications include:*

- *Improving Wellhead Management and Conditions*
- *Improving Pesticide Storage and Handling*
- *Improving Fertilizer Storage and Handling*
- *Improving Petroleum Product Storage*
- *Improving Hazardous Waste Management*
- *Improving Household Wastewater Treatment*
- *Improving Livestock Manure Storage and Treatment Facilities*
- *Improving Livestock Holding Pen Management*
- *Improving Milking Center Wastewater Treatment*

All documents, educational materials, etc. will be provided to the TSSWCB for review and comment prior to dissemination.

The following actions have been completed during this reporting period:

- b. No activity to report this quarter.

0% Complete

Subtask 2.3: Develop and adapt additional educational resources to create a TWON curriculum. Resources will be developed by the TWON Coordinator, with significant assistance from Project Co-Leads and the BAEN Program Specialist. Specific components or modules of the curriculum may include:

- *Watershed and groundwater hydrology and the importance to neighbors and the public of safeguarding aquifer integrity and groundwater quality*
- *Proper siting of drinking water wells and avoiding improper well construction techniques*
- *Proper maintenance and protection of the wellhead*
- *Solid and hazardous household waste management*
- *Aging and failure of well construction materials*
- *Locating and properly plugging abandoned wells*
- *Improperly sited and functioning on-site wastewater treatment systems*
- *Maintenance, aging and failure of on-site wastewater treatment systems*
- *Effects of land use changes on well water quality*
- *Successful methods of sharing TWON information with neighbors and community.*

TWON curriculum will include a handbook for participants, standardized presentations for program delivery and availability of program materials online.

All documents, educational materials, etc. will be provided to the TSSWCB for review and comment prior to dissemination.

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

TASK 3: Deliver updated and renamed TEX*A*Syst Publications, Well Water Screenings, and TWON trainings

Subtask 3.1: *SCSC will develop a preliminary list of watersheds where the Well Water Screenings and TWON trainings will be delivered. SCSC will work with the TSSWCB and other state and local organizations to select locations for these training events. SCSC will coordinate efforts with state agencies and organizations already involved in WPP/TMDL processes or who are planning future WPP/TMDL processes in specific watersheds.*

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

Subtask 3.2: *SCSC with assistance from TWRI will develop and disseminate informational materials in order to actively market well water screenings and TWON trainings including news releases, internet postings, newsletter announcements, public/conference presentations, flyers, etc. As appropriate TWRI will include information on the project in the txH₂O, New Waves e-letter, and AgriLife news. All announcements, letters, and publications will be provided to the TSSWCB for review and comment prior to dissemination.*

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

Subtask 3.3: *Deliver 6-hour TWON trainings in selected watersheds, with the minimum goal being 6 trainings in year 2, and 8 trainings in year 3 to increase local understanding of the factors which can adversely impact well water quality and provide access to the knowledge and tools which can be employed to prevent and/or resolve them. Trainings will be delivered by the TWON Coordinator, and a combination of the BAEN and SCSC Program Specialists and the SCSC Assistant Professor and Extension Specialist.*

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

Subtask 3.4: *Deliver well screening events to provide well-head protection information and recommendations for remediating well contamination, if appropriate. Screenings will be delivered by the SCSC Assistant Professor and Extension Specialist, TWON Coordinator and/or the SCSC Program Specialist as appropriate. A minimum of 30 well screening events will be delivered throughout the course of the project. Well screening event educational programming will include an overview of the topics discussed in more detail during comprehensive TWON trainings. Well screening events will be conducted in conjunction with TWON trainings as well as other Texas AgriLife Extension programs.*

The following actions have been completed during this reporting period:

- a. There are approximately 12 well screenings schedule between April and Nov 2011. (Appendix A.)

TASK 4: Evaluate the effectiveness of the TWON trainings

Subtask 4.1: *SCSC will develop and deliver pre-test/post-test evaluation strategy to evaluate increased knowledge by individuals participating in the TWON trainings regarding program principles, appropriate BMPs, and other activities; to address proper private well management, to evaluate participant satisfaction with the program; and to evaluate participant's intentions to change their behavior as a result of the TWON training.*

The following actions have been completed during this reporting period:

- a. Surveys will not need TSSWCB approval.

1% Complete

Subtask 4.2: *SCSC will develop and deliver 6 month follow-up survey via online techniques to assess behavior changes adopted and other activities (such as number of neighbors contacted) by TWON training participants.*

The following actions have been completed during this reporting period:

- a. Surveys will not need TSSWCB approval.

1% Complete

Subtask 4.3: *SCSC will analyze results obtained from the pre-test/post-test and 6 month follow-up evaluations using descriptive, correlational, and analysis of variances statistical procedures.*

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

Subtask 4.4: *SCSC will modify educational program and materials as appropriate..*

The following actions have been completed during this reporting period:

- a. No activity to report this quarter.

0% Complete

III. Related Issues/Current Problems and Favorable or Unusual Developments

- Loren would like a presentation of the project to be given to the annual meeting of the SWCDs at some point. Aaron would like, if possible, for it to be during the October 24- 26, 2011 in meeting San Antonio in hopes of attracting attention to the project.

IV. Projected Work for Next Quarter

- TWON Coordinator to start
- Next group meeting is set for Tuesday May 17 from 10-1200 in Centeq room 200.

APPENDIX A

04-15-11

Page 6 of 6

Aquifer/s	GCD	GMA	Type	FY	Q	Date	City	County/ies	Contact	Affiliation
Trinity; Sparta	Fox Crossing Water District, Hickory UWCD No. 1	7 and 8	Screening	11	3	4-5 Apr 2011	Goldthwaite	Mills; San Saba	Tom Guthrie	AgriLife CEA
Edwards-Trinity Plateau; Sparta	Kimble Co. GCD, Kenney Co. GCD, Real-Edwards C and R District	7	Screening	11	3	13-15 Apr 2011	Leakey	Edwards; Kimble; Kinney; Real	Joel Pigg	AgriLife CEA
Trinity; Sparta	Cow Creek GCD, Blanco-Pedernales GCD	9 and Hill Country PGMA	Screening	11	3	18-19 Apr 2011	Johnson City	Kendall; Blanco	Todd Swift	AgriLife CEA
Gulf Coast; Yegua Jackson	Starr Co. GCD	16	Screening	11	3	2-3 May 2011	Alice	Starr	Omar Montemayor	AgriLife CEA
Gulf Coast; Sparta	Brush Co. GCD, Duval Co. GCD, Kenedy Co. GCD, Live Oak UWCD	16	Screening	11	3	4-5 May 2011	Rio Grande City	Brooks; Duval; Jim Hogg; Jim Wells; Live Oak	Rogelio Mercado	AgriLife CEA
Trinity	no GCD	6	Screening	11	3	31 May 2011	Jacksboro	Jack	Heath Lusty	AgriLife CEA
Seymour, Blaine	no GCD	6	Screening	11	3	1 June 2011	Aspermont	Stonewall	Jason Miller	AgriLife CEA
Gulf Coast	Victoria Co. GCD	15	Screening	11	4	27 July 2011	Victoria	Victoria	Sam Womble	AgriLife CEA
Carrizo-Wilcox; Yegua Jackson	no GCD	13	Screening	12	1	6-7 Oct 2011	Laredo	Webb	George Gonzales	AgriLife CEA
Trinity; Woodbine	Upper Trinity GCD	6 and 8; North-Central Texas Trinity and Woodbine Aquifers PGMA	Screening	12	1	10 Oct 2011	Weatherford	Palo Pinto; Parker	Jon Green	AgriLife CEA
Seymour	no GCD	6	Screening	12	1	11 Oct 2011	Graham	Stephens; Young	Brad Morrison	AgriLife CEA
Trinity; Woodbine	Upper Trinity GCD, Prairie Lands GCD	8; North-Central Texas Trinity and Woodbine Aquifers PGMA; Central Texas Trinity Aquifer PGMA	Screening	12	1	24 Oct 2011	Granbury	Hood; Somervell	Marty Vahlenkamp	AgriLife CEA