

**Texas Riparian and Stream Ecosystem Education Project**  
**CWA 319(h) NPS Grant Program**  
**TSSWCB Contract No. 15-04**

Quarter no. 2 From 04/01/16 Through 06/31/16

**I. Abstract**

In this quarter the project work primarily focused on advertising, coordinating, conducting and preparations for the Stream Restoration Conference in San Antonio June 1-3, 2016 and the following workshops: Lampasas, Lavaca, Big Cypress Creek, Gilleland Creek, and Village Creek/Lake Arlington. The other major effort was in updating and preparing materials, website, coordinating registration and conducting the new updated agenda. This included coordinating the workshops with agency partners and the Planning Team, to put together instructors, updating the course materials (powerpoints and evaluations), website and advertising materials. We also selected the date and location and have started planning for the Riparian Symposium to be in Houston February 16-17, 2017. Work also continued on contacting watershed coordinators to plan future workshops across the state for 2016.

**II. Overall Progress and Results by Objective and Task**

**OBJECTIVE 1: PROJECT ADMINISTRATION**

To effectively administer, coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status reports.

*Task 1.1: Project Administration – 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 15<sup>th</sup> 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 developed the QPR framework for the project for the first reporting process.
- b. TWRI submitted the QPR by the Deadline.

**24% Complete**

*Task 1.2: TWRI and SRS 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. SRS and TWRI have set up the accounts and subaccount for Texas A&M Forest Service.
- b. To date this project has spent \$63,236.49 through May 2016 or 16%.

**16% Complete**

*Task 1.3: TWRI will host coordination meetings or conference calls, at least quarterly, with Project Partners to discuss project activities, project schedule, communication needs, deliverables, and other requirements. 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. TWRI has conducted multiple meetings and teleconference calls with members of the Planning Team over the quarter to update the agenda, presentations, and schedule upcoming trainings.
- b. The planning team has also been very engaged in the planning of program and advertising of the Stream Restoration Conference being run by Resource Institute.
- c. The planning team of instructors met for the day in Waco on April 28, to discuss the program, future locations, updates, and start planning the Urban Riparian Symposium in Houston for February 16-17, 2017.

**24% Complete**

*Task 1.4: TWRI will attend and participate in meetings, as appropriate, in order to communicate project goals, activities and accomplishments to affected parties. Such meetings may include, but are not limited to, Clean Rivers Program Basin Steering Committees, Texas Watershed Planning Short Course, Texas Watershed Coordinator Roundtables, and the TSSWCB Southeast and South Central Texas Regional Watershed Coordination Steering Committee.*

The following actions have been completed during this reporting period:

- a) TWRI presented about the upcoming Riparian and Stream Ecosystem Trainings at the January 11, 2016 Watershed Coordinators Roundtable in College Station.
- b) TWRI will present about the Riparian and Stream Ecosystem Trainings at the July 13, 2016 Watershed Coordinators Roundtable in Waco, TX.

**24% Complete**

*Task 1.5: TWRI and TRA will continue to host and maintain (Months 1-36) the <http://texasriparian.org> website to serve as a public clearinghouse for project-related information and the riparian program website and online RSVP system at <http://nrt.tamu.edu/courses/texas-riparian/>. These program websites serve as a means to disseminate information to stakeholders and the general public.*

- a) The following actions have been completed during this reporting period: TWRI has continued to update the website and advertise the trainings and program through the website, listserv, blog and facebook.
- b) TWRI has added information about the SW Stream Restoration Conference and the upcoming Urban Riparian Symposium.
- c) TWRI has included the workshops on the online RSVP system on the Natural Resource Training System.
- d) TWRI advertised the SW Stream Restoration Conference on the website, facebook, listserv and blog.

- e) TWRI has added Save the Date information for the upcoming Riparian Symposium to be held in Houston on February 16-17, 2017.

**24% Complete**

*Task 1.6: TWRI will develop a Final Report that summarizes activities completed and conclusions reached during the project and discuss the extent to which project goals and measures of success have been achieved.*

The following actions have been completed during this reporting period:

- a. No activities to report during this quarter.

**0% Complete**

## **OBJECTIVE 2: COORDINATE AND DELIVER RIPARIAN EDUCATION PROGRAMS**

Deliver riparian education programs to targeted watersheds to promote healthy riparian areas, thus healthy watersheds, by increasing citizen awareness, understanding, and knowledge about the nature and function of riparian zones, their benefits, and BMPs for protecting them and minimize NPS pollution.

*Task 2.1: TWRI will continue to coordinate the existing Riparian Team to direct this synergistic project. The Riparian Team includes TWRI, TFS, TPWD, NRCS, TRA, NRA and TTU-LRFS. The Riparian Team will continue to assist with program development, marketing, and delivery. This Riparian Team will serve as the primary pool of instructors to deliver the Riparian Education Program. The Riparian Team will meet as frequently as needed, likely quarterly in year 1 and semi-annually in years 2-3.*

The following actions have been completed during this reporting period:

- a) TWRI has continued to communicate with the planning team by email and phone throughout the quarter.
- b) Planning Team Meetings have occurred.
- c) TWRI met with TSSWCB to discuss the list of new watersheds for TSSWCB to discuss with TCEQ in Temple on January 28, 2016.
- d) TWRI has had several calls with TSSWCB project manager discussing the timeline of future trainings.

**24% Complete**

*Task 2.2: TWRI will work in coordination with TSSWCB, TCEQ, TPWD, NRCS, TFS, and other state and local organizations to select locations for the riparian education training events. This project will deliver riparian education programs to targeted watersheds across the state. Priority watersheds will be selected in collaboration with TSSWCB, and with input from TCEQ and others, and primarily represent those with approved WPPs or TMDLs and those developing or planning development of WPPs or TMDLs. Other watersheds may be selected based on need and in response to collaborations with other groups and organizations, including river authorities, SWCDs, local citizen groups/watershed associations, etc. Watersheds will be selected consistent with the State's implementation of the Texas NPS Management Program. Additional watersheds*

*will be selected based on impairment status, environmental sensitivity, and/or other priority issues. TWRI and TSSWCB will periodically make collaborative decisions to re-prioritize and add to/remove from the list of watersheds.*

The following actions have been completed during this reporting period:

- a) TWRI has been working with watershed coordinators and TSSWCB to start scheduling trainings.
- b) Big Cypress Basin/Lake O' The Pines Training was held on April 27, 2016 in Jefferson.
- c) Gilleland Creek Watershed Riparian Training was held on May 5, 2016 in Pflugerville.
- d) Village Creek/Lake Arlington Watershed Riparian Training was held on May 24, 2016 in Arlington.
- e) TWRI chaired the planning committee, was a plenary speaker presenting results on the Riparian and Stream Ecosystem Education Program, and moderated both the opening and closing plenary sessions for the Southwest Stream Restoration Conference that was held June 1-3, 2016 in San Antonio.
- f) TWRI is working to schedule riparian training in the following areas:
  - o Navasota River Basin
  - o Dallas/Fort Worth Area

#### **24% Complete**

*Task 2.3: The TWRI and Riparian Team will continue establishing CEU credits for the riparian education program to encourage participation by landowners and water resource professionals.*

The following actions have been completed during this reporting period:

- a) TWRI had all CEUs reviewed by the appropriate entities to see if any changes in the number of hours needed to occur with the new Agenda and times.
- b) The Texas Board of Professional Land Surveying has approved the riparian training for 7 credit hours.
- c) The Riparian Training Program has been approved by the Certified Crop Advisers for a total of 7 CEUs (1 – Nutrient Mgmt; 1.5 – Soil & Water Mgmt; 1.5 – Integrated Pest Mgmt; 2.5 – Crop Mgmt; 0.5 – Manure Mgmt).
- d) TWRI is in the process of searching for new opportunities to provide CEU credits.

#### **32% Complete**

*Task 2.4: TWRI, with assistance of the Riparian Team, will actively market riparian education trainings through news releases (AgriLife News and local media outlets), internet postings, listserv, facebook, newsletter announcements, public/conference presentations, flyers, etc., to enhance awareness and utilization. TSSWCB must review and approve all project-related content in any materials prior to distribution.*

The following actions have been completed during this reporting period:

- a) Press release for Big Cypress Basin/ Lake O' the Pines Riparian Training sent through AgriLife today for Riparian Trainings can be found online at: <http://today.agrilife.org/2016/04/19/stream-riaprtian-apr27-jefferson/>
- b) Press release for Gilleland Riparian Training was sent out through AgriLife today for Riparian Trainings can be found online at: <http://today.agrilife.org/2016/04/27/riparian-and-stream-ecosystem-workshop-set-for-may-5-in-pflugerville/>
- c) Press release for Village Creek/Lake Arlington Riparian Training was sent out through AgriLife today for Riparian Trainings can be found online at: <http://today.agrilife.org/2016/05/17/riparian-and-stream-ecosystem-workshop-set-for-may-24-in-arlington/>
- d) Press release for Big Cypress Basin Riparian Training in Jefferson was sent out through AgriLife today for Riparian Trainings can be found online at: <http://today.agrilife.org/2016/04/19/stream-riaprtian-apr27-jefferson/>
- e) Emailed to various press agencies in Harrison, Marion, Titus, Cass, and Camp counties to advertise Big Cypress Basin/Lake O' the Pines training.
- f) Emailed to various press agencies in Travis County to advertise Gilleland Creek training.
- g) Emailed to various press agencies in Johnson and Tarrant counties to advertise Lake Arlington/Village Creek training.
- h) Advertised all trainings on the website, web blog, Facebook and Listserv.

**25 % Complete**

*Task 2.5: TWRI, with assistance of the Riparian Team, will deliver 24 riparian education training events in prioritized watersheds (Subtask 2.2) during the project period with approximately 8 per year. Certificates of completion will be provided to all participants in the trainings.*

The following actions have been completed during this reporting period:

- a) Conducted Big Cypress Basin/ Lake O' the Pines Riparian and Stream Education Workshop, April 27, 2016 – Jefferson for 57 Attendees. Agenda is attached.
- b) Conducted Gilleland Creek Riparian and Stream Education Workshop, May 5, 2016 – Pflugerville for 48 Attendees. Agenda is attached.
- c) Conducted Lake Arlington/Village Creek Riparian and Stream Education Workshop, May 24, 2016 – Arlington for 74 Attendees. Agenda is attached.
- d) TWRI is working on scheduling trainings for the following:
  - o Dallas/Fort Worth Area
  - o Navasota River Basin
  - o Attoyac Bayou
  - o Lower Nueces River

**25 % Complete**

*Task 2.6: TWRI in collaboration with the Riparian Team will update a series of riparian education presentations of various lengths (15/30/45/60 min.) and provide them to a variety of audiences and venues statewide such as those listed in Subtask 1.4, but also including county and multi-county Extension programs, landowner workshops, SWCD programs, and other suitable venues. Further, key elements of the program will be incorporated into presentations delivered by TFS, TWRI, and others on the Riparian Team and delivered to a variety of audiences throughout the state.*

The following actions have been completed during this reporting period:

- a) TWRI presented stream, riparian and aquatic issues to the Master Naturalist Chapter in Roundtop with 36 participants on April 11, 2016.
- b) TWRI is also scheduled to present at the July Watershed Coordinators Roundtable with about 70 attendees.
- c) TWRI was represented riparian and water quality issues at the Texas A&M Forest Service: Forests and Drinking Water Meeting in Conroe on May 11.

**24% Complete**

*Task 2.7: TWRI will coordinate two statewide riparian conferences in coordination with the Texas Riparian Association, professional organizations, River Authorities, or other entities annual meetings.*

The following actions have been completed during this reporting period:

- a. TWRI co-chaired the planning committee for the SW Stream Restoration Conference with Resources Institute which took place in San Antonio June 1-3, 2016.
- b. Dictson was an opening Plenary speaker and talked about the results from this program.
- c. TWRI assisted with advertising this upcoming conference at meetings, through the website, facebook, and the listserv.
- d. Riparian Planning Team Members and TRA are participating on the planning committee, presented and were moderators at the conference.
- e. TWRI has begun forming the planning committee for the Urban Riparian Symposium on February 16-17 in Houston.

**55 % Complete**

### **OBJECTIVE 3: The Texas A&M Forest Service's Role in the Riparian and Ecosystem Education Program**

**Participate on Riparian Team and assist with planning program development, marketing, and delivery of riparian landowner programs, annual conferences, and other trainings as appropriate.**

*Task 3.1: TFS will participate on Riparian Team by attend meetings/conference calls and reviewing program materials.*

The following actions have been completed during this reporting period:

- TFS participated in riparian education program work sessions to update the workshop design and content.
- TFS participated on conference calls to discuss training materials, dates, and locations.
- TFS met with Riparian Planning Team and TRA in Waco on April 28<sup>th</sup>, to continue work on workshop design, updates, future locations, and planning the Urban Riparian Symposium.

**25% Complete**

*Task 3.2: TFS will assist with development, marketing, and delivery of riparian landowner programs, annual conferences, and other trainings. TFS will update Forestry and Urban presentations as appropriate for 15 trainings.*

The following actions have been completed during this reporting period:

- TFS presented at the Big Cypress Creek and Gilleland Creek Riparian Education Workshops.
- TFS continued to serve on the SW Stream Restoration Planning Conference and is presenting at it.
- TFS attended the SW Stream Restoration Conference in San Antonio and presented.
- TFS is serving on the planning committee of the Urban Riparian Symposium.

**25% Complete**

*Task 3.3: TFS will assist by providing information for quarterly progress reports, annual reports, and final reports.*

The following actions have been completed during this reporting period:

- TFS submitted accomplishments for the quarterly progress report.

**24% Complete**

**OBJECTIVE 4: EVALUATE THE EFFECTIVENESS OF THE RIPARIAN EDUCATION TRAININGS**

**To measure both knowledge and behavior changes of individuals participating in the program.**

*Task 4.1: TWRI will conduct pre- and post-training evaluations to assess increased knowledge of participants on the nature and function of riparian zones, their benefits, and BMPs for protecting them and minimize NPS pollution; to evaluate participant satisfaction with the program; and to evaluate participant's intentions to change their behavior as a result of the program. Evaluate the potential of rapid stream bioassessments by volunteer citizen scientists and the benefit of this additional method. Additionally, TWRI will deliver a follow-up assessment via email post follow-up to ascertain behavior changes actually adopted by participants.*

The following actions have been completed during this reporting period:

- a) TWRI conducted pre and post evaluations at the Big Cypress Creek Basin Riparian Training on April 27, 2016.

- b) TWRI conducted pre and post evaluations at the Gilleland Creek Riparian Trainings on May 5, 2016.
- c) TWRI conducted pre and post evaluations at the Village Creek – Lake Arlington Riparian Trainings on May 24, 2016.

**25 % Complete**

*Task 4.2: TWRI will analyze results obtained from the pre-/post-tests and post follow-up assessment using descriptive, correlational, and analysis of variances statistical procedures. Results will be used to periodically evaluate and modify riparian education program materials and incorporated into the final report.*

The following actions have been completed during this reporting period:

- d) TWRI entered all of the data from the pre and post evaluations and statistically analyzed the data to show that the increase in knowledge, demographics and satisfaction questions from the Trainings.

**25 % Complete**

Expected Work for the Next Quarter:

- Schedule and conduct Stream and Riparian Trainings around the state with watershed coordinators for the fall and spring.
- Continue to present at meetings and market the upcoming trainings.
- Continue planning, advertising and conducting the Urban Riparian Conference.
- TWRI will continue to update the website with relevant materials, trainings, and links.
- TWRI will advertise upcoming scheduled trainings and conduct registration for them all.

Schedule and Agendas:



Texas Riparian and Stream Ecosystem Education Program

Watershed	Dates	Watershed Coordinators	Affiliation	Counties	# Attendees	Acres
Attoyac Bayou	December 3, 2015	Lucas Gregory & Ricky Thompson	TWRI/ Nacogdoches Co AgriLife Ext	Rusk, Nacogdoches, San Augustine and Shelby Counties	50	15,531.25
Lampasas River Watershed	March 3, 2016	Lisa Prcin	AgriLife Research	Bell, Burnet, Coryell, Hamilton, Lampasas, Mills, and Williamson Counties	48	220,015
Lavaca Navidad River Basin	March 29, 30,31	Allen Berthold	TWRI	Edna, TX	26	7,765
Big Cypress Creek Basin - LOP	April 27, 2016	NETMWD/Dictson/Gregory	NETMWD/TWRI	Morris, Upshur, Cass, Marion, and Harrison	57	53,685
Gilleland Creek	May 5, 2016	Trey Fletcher/Lauren Young	Pflugerville/TCEQ	Travis County	48	3,114
Village Creek Lake Arlington	May 24, 2016	Fred Hall/Aaron Hoff	Tarrant County Ext./Trinity River	Tarrant County	74	7,136
Attoyac Bayou	September 22, 23, 29	Lucas Gregory & Ricky Thompson	TWRI/ Nacogdoches Co AgriLife Ext	Rusk, Nacogdoches, San Augustine and Shelby Counties		
Navasota River	Oct/Nov 2016	Lucas Gregory	TWRI TMPA Facility?	Carlos		
Lower Nueces	Oct/Nov 2016	Rocky Freund	LNRA	Nueces County		
San Antonio River	Fall/Spring 2016	Aarin Teague	SARA	Karnes & Goliad		
NCTCOG Dallas/Ft. Worth	Fall/Spring 2016	Tamara/Erin Kelley	NCTCOG	Tarrant/Dallas		
<b>Requested Watersheds</b>						
NCTCOG Dallas/Ft. Worth			NCTCOG	Tarrant/Dallas		
	Completed					
	Tentative Schedule					
	TBD					
	To Be Contacted					
	Requested					



## Cypress Creek Watershed –Agenda April 27, 2016

- 8:00 Meeting Registration
- 8:15 Welcome & Introductions
- Doug Weir, AgriLife Extension Marion County &
  - Walt Sears, Executive Director of Northeast Texas Municipal Water District
- 8:30 Program Overview, Watershed & Riparian Management & Water Quality
- Nikki Dictson, Texas Water Resources Institute
- 9:15 How Creeks Function & Bear Creek Example
- Melissa Parker, Texas Parks and Wildlife Department
- 10:00 Break
- 10:15 Riparian Vegetation
- Jim Rogers, USDA Natural Resources Conservation Service (NRCS)
- 11:00 Management Practices, Local Resources and Photo Monitoring of Streams
- Nikki Dictson, Texas Water Resources Institute
- 11:45 Lunch
- 12:00 Cypress Creek Basin
- Robert Speight, Northeast Texas Municipal Water District
- 12:15 The Role of Forests and Trees in Watershed Protection
- Todd Thomas, Texas A&M Forest Service
- 1:00 Lanes Balance Presentation
- 1:30 Trip to the Creek (Split into 3 groups for 40-45 min stations)
- Creek Walk – NRCS, TFS and TPWD
  - Assistance for Improving the Health of Creeks – Kyle Wright, NRCS
  - Feral Hogs – Billy Higginbotham, Texas AgriLife Extension Service
- 4:00 Wrap Up Evaluation and Head for Home!

<http://texasriparian.org/> and  
<https://www.facebook.com/TexasRiparianAssociation>





## Gilleland Creek Watershed – Agenda May 5, 2016

- 8:00 Meeting Registration
- 8:15 Welcome & Introductions
  - Mayor Jeff Coleman, Pflugerville
- 8:30 Program Overview, Watershed & Riparian Management & Water Quality
  - Nikki Dictson, Texas Water Resources Institute
- 9:15 How Creeks Function & Bear Creek Example
  - Melissa Parker, Texas Parks and Wildlife Department
- 10:00 Break
- 10:15 Riparian Vegetation
  - Dennis Brezina, USDA Natural Resources Conservation Service (NRCS)
- 11:00 Management Practices, Local Resources and Photo Monitoring of Streams
  - Nikki Dictson, Texas Water Resources Institute
- 11:45 Lunch
- 12:00 Gilleland Creek Watershed
  - Roberto Vega, City of Pflugerville
- 12:15 The Importance of Forests and Trees to Watershed Protection
  - Lori Hazel, Texas A&M Forest Service
- 1:00 Lanes Balance Presentation
- 1:30 Trip to the Creek (Split into 3 groups for 40-45 min stations)
  - Creek Walk – NRCS, TFS and TPWD
  - Assistance for Improving the Health of Creeks – Kyle Wright, NRCS
  - LCRA Creekside – Marshall Trigg /Colorado River Land Trust – Rob Stroup
  - Feral Hogs – Josh Helcel, AgriLife Extension Service
- 4:00 Wrap Up Evaluation and Head for Home!

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## Riparian & Stream Ecosystems



### Village Creek-Lake Arlington Watershed

#### Agenda - May 24, 2016

- 8:00 Meeting Registration
- 8:15 Welcome & Introductions
- Fred M. Hall, Texas AgriLife Extension Service, Tarrant County
  - Aaron Hoff, Trinity River Authority
- 8:30 Program Overview, Watershed & Riparian Management & Water Quality
- Nikki Dictson, Texas Water Resources Institute
- 9:15 How Creeks Function & Bear Creek Example
- Melissa Parker, Texas Parks and Wildlife Department
- 10:00 Break
- 10:15 Riparian Vegetation
- Ricky Linex, USDA Natural Resources Conservation Service (NRCS)
- 11:00 Management Practices, Local Resources and Photo Monitoring of Streams
- Nikki Dictson, Texas Water Resources Institute
- 11:45 Lunch
- Stream Trailer Exhibit – Tarrant Regional Water District
- 12:45 Village Creek-Lake Arlington Watershed
- Aaron Hoff, Trinity River Authority
- 1:00 Travel to Fish Creek Preserve (Park at Kohl's)
- 1:15 Lanes Balance Presentation
- 1:30 Trip to the Creek (Split into groups for 2-3 stations)
- Creek Walk – NRCS and TPWD
  - Assistance for Improving the Health of Creeks – Kyle Wright, NRCS
  - Feral Hogs – Josh Helcel, AgriLife Extension Service
- 4:00 Wrap Up Evaluation and Head for Home!

<http://texasriparian.org/> and <https://www.facebook.com/TexasRiparianAssociation>



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