

Texas Riparian and Stream Ecosystem Education Project
CWA 319(h) NPS Grant Program
TSSWCB Contract No. 12-07

Quarter no. 12 From 7/01/15 Through 9/30/15

I. Abstract

In this quarter the project work primarily focused on advertising, coordinating, conducting and preparations for the San Gabriel River, wrap up for the two PFC workshops and riparian workshops held in June and the Final Report. This included coordinating the workshops with agency partners and the Planning Team, to put together instructors, updating the course, website and advertising materials. Work also continued on updating webpages, updating presentations /evaluations, and visiting with some of the watershed coordinators about this program. Nueces River Authority has finished working on digital tools and updating the Remarkable Riparian Website, and providing the Remarkable Riparian publications for workshop attendees.

II. Overall Progress and Results by Objective and Task

OBJECTIVE 1: PROJECT ADMINISTRATION

Administer, coordinate and monitor all work performed under this project including technical and financial supervision and preparation of status and final reports.

Task 1.1: Project Administration –TWRI/IRNR will prepare electronic quarterly progress reports (QPRs) for submission to 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. The QPR for the last quarter was submitted on 03/13/15 date.

100% Complete

Task 1.2: TWRI/IRNR 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. TWRI and SRS submitted reimbursement forms for the previous quarter.
- b. TWRI and SRS have processed monthly invoices from NRA.
- c. TWRI and SRS have processed quarterly invoices from Texas A&M Forest Service.

95% Complete

Task 1.3: TWRI/IRNR 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/IRNR 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 including:
 - Conference Calls and emails with Steve Nelle occurred for planning and coordinating Riparian Workshops.
 - Calls with Russell Castro and Kyle Wright with NRCS to be instructors at workshops.
 - Melissa Parker and Ryan McGillicuddy both with TPWD about the workshops and planning of workshops.
 - Kenneth Mayben with NRCS on PFC Trainings.
 - Emails and calls with Planning Team/TRA Board Members on workshops and professionals 2-day Riparian PFC Trainings.
 - Calls/emails with Hughes Simpson, TFS on forestry presentation, website links, quarterly reporting, etc,
 - TRA Board Business Emails multiple throughout quarter that discussed website and meetings
 - NRA emails discussing the websites and tools occurred during the quarter
 - Calls and emails with Tina Hendon, TRWD to plan the Richland Chambers Workshop.
 - Calls and emails with Lucas Gregory and Ricky Thompson AgriLife Extension about the potential for an Attoyac Bayou training.
 - Calls and emails with David Hunter, Joetta Daily, Matthew Hendricks all of the City of Denton and Blake Alldredge, UTRWD for the Hickory Creek Training.
 - Calls with City of Georgetown and County Agent for San Gabriel River Watershed Training.

100% Complete

Task 1.4: TWRI/IRNR 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 has initiated scheduling presentations to advertise the new program including the following scheduled events during the next quarter.
 - Dictson conducted a one-hour education program for the Lavaca-Navidad River Authorities Clean Rivers Program Meeting near Edna, TX on July 30, 2015 to 24 attendees to discuss Riparian and Stream Issues and the Riparian Program.
 - TWRI announced future workshops at the Watershed Coordinators Roundtable in San Marcos on August 12, 2015.

- TWRI conducted a 45 min talk about Brazos Valley River and Riparian issues at the Brazos County Feral hog workshop for over 150.
- b. TWRI has developed a Workshop flier/registration form for each of the workshops.

100% Complete

Task 1.5: TWRI/IRNR will develop (Month 1-3), host and maintain (Months 4-36) a website to serve as a public clearinghouse for project-related information. This website will serve as a means to disseminate information to stakeholders and the general public.

The following actions have been completed during this reporting period:

- a. TWRI/IRNR has initiated the project website as a part of the Texas Riparian Website – texasriparian.org and the TWRI/IRNR trainings website will manage all of the training RSVPs/registrations.
- b. The training registration site has the newly scheduled dates available for attendees to RSVP to the workshops and it is linked to the TRA website.
- c. These websites are coordinated and linked to RemarkableRiparian.org website that is being managed by Sky Lewey - Nueces River Authority and have the online educational delivery as discussed in Task 3.
- d. TexasRiparian.org website had 1,999 visitors for the quarter and 31,764 since January 2013.
- e. The TexasRiparian.org website has 5,180 subscribed to the website and posts.
- f. TWRI set up a twitter feed on the TexasRiparian.org website so that all of the TWRI twitters are shown on the homepage of the website.
- g. TWRI set up a facebook and currently has 575 likes at <https://www.facebook.com/TexasRiparianAssociation>
- h. Materials continue to be developed and added to the websites weekly including information about upcoming Conferences, voice over powerpoints videos, online tools and resources, and upcoming workshops are on both websites.
- i. Workshops were advertised through the websites, the listserv and facebook.

100% Complete

Task 1.5: TWRI/IRNR will develop a final report covering all project activities.

The following actions have been completed during this reporting period:

- a. TWRI has ran statistical analysis of the Riparian Workshop Evaluations that will be incorporated into the final Report. Resent all online evaluations to participants.
- b. TWRI has updated materials including lists of workshops and attendees for reporting purposes.
- c. TWRI has submitted the Final Report to TSSWCB.

100% 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/IRNR will employ an Extension Program Specialist who will serve as the Riparian Education Program Coordinator and will be responsible for the general oversight and coordination of all project activities and for promoting, coordinating, and delivering riparian education training events and web-based tools.

The following actions have been completed during this reporting period:

- a. An Extension Program Specialist II, Nikki Dictson has been hired to serve as the Riparian Education Program Coordinator.

100% Complete

Task 2.2: TWRI/IRNR will establish a Riparian Team to direct this synergistic project. This Riparian Team will include TWRI/IRNR, ESSM, TFS, TPWD, NRA, NRCS, TRA, and TTU-LRFS. This Riparian Team will 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 established a Riparian Team of specialists that includes TWRI/IRNR, ESSM, TFS, TPWD, NRA, NRCS, TRA, and TTU-LRFS.
- b. Multiple emails and calls occurred with riparian planning team members and instructors throughout the quarter. Emails included materials for review and comment.
- c. Multiple calls and emails occurred with planning team members to discuss who was available to be instructors for the workshops during the quarter. This included contact with Steve Nelle, Melissa Parker, Ryan McGillicuddy, Russell Castro, Kyle Wright, Hughes Simpson, Lori Hazel, Sky Lewey, Georgianne Moore, Anne Rogers, Kevin Anderson, Blake Alldredge, Tom Arsuffi and Ken Mayben. This included planning and assistance with the two Riparian Proper Functioning Conditioning Courses for Professionals in June.
- d. Multiple calls and emails were conducted with Watershed Coordinators and County Extension Agents about the logistics, RSVPs, and the agendas for the 1 upcoming and follow up with workshop 4 workshops.

100% Complete

Task 2.3: The Extension Program Specialist will compile the amassed body of work utilized by the various entities for riparian workshops and conferences. In conjunction with the Riparian Team, the Extension Program Specialist will select the most appropriate educational materials and resources for use in identified priority watersheds. Although existing resources and guides will be used for trainings; where possible, regional information and curriculum will be developed by the

Extension Program Specialist and Riparian Team. TFS will be integral for both adapting the program and delivering it in East Texas. NRA will be integral for adapting the program and delivering it in the Texas Hill Country and South Texas and providing the Riparian Team their valuable experience of program delivery in the Nueces watershed. As possible, TWRI/IRNR and the Riparian Team will work with cities to adapt the program for delivery in urban areas as well.

The following actions have been completed during this reporting period:

- a. TWRI worked with the National Riparian Service Team and BLM to get the newest version for the Proper Functioning Condition Assessment Guidance Document to use at the two Riparian PFC 2-day courses for professionals. TWRI, TRA, NRCS, Texas Parks and Wildlife Department, Texas A&M Forest Service all assisted with coordinating and planning of the courses in June.
- b. Conducted follow up and evaluations for the planning of the two Riparian Proper Functioning Condition Assessment Courses held in Waxahachie on June 3-4 and in Belton on June 17-18.
- c. Many of the planning team members have continued spending time assisting landowners calls and emails after the devastating floods that occurred in Wimberley about 4 days after our workshop there that had 73 attendees.
- d. Conducted San Gabriel workshop for 80 Attendees and included information about newly listed as threatened Georgetown Salamander. Presentations by the City and County on this issue and how they are working to protect their habitat.

100% Complete

Task 2.4: TWRI/IRNR will work in concert 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. Initial priority shall be given to Buck Creek, Cedar Creek Reservoir, Dickinson Bayou, Geronimo Creek, Hickory Creek, Lampasas River, Pecos River, Plum Creek, San Bernard River, and Upper Llano River. 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/IRNR 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 continues to coordinate with TSSWCB and TCEQ on the list of watersheds for workshops across the state. TWRI continues keeping a list of folks that have contacted them with interest in a workshop.
- b. TWRI has been contacting watershed coordinators to determine when would be most appropriate to hold a workshop in their area. The latest version of the list is attached.
- c. Workshops conducted:
 - a. Upper San Antonio River, April 1, 2015

- b. Cypress Creek in Wimberley on May 19, 2015.
- c. Hickory Creek in Denton on May 21, 2015.
- d. Richland Chambers in Waxahachie on June 2, 2015
- e. Professional PFC Workshop in Waxahachie on June 3-4, 2015
- f. Professional PFC Workshop in Belton on June 17-18, 2015
- g. Texas A&M Forest Service attended the Belton Riparian PFC Training.
- h. San Gabriel River in Georgetown on September 3, 2014.
- d. Texas Parks and Wildlife Department, NRCS, and TWRI were instructors at the workshops.
- e. Future workshops planned:
 - a. None/Complete
- f. Future workshops in the planning stages:
 - a. Attoyac Bayou will need to be pushed to October/November 2015.
 - b. Gilleland Creek in Pflugerville during October/November 2015
 - c. Big Cypress/Lake O' the Pines working on fall 2015
 - d. We have been contacted by the North Central Texas Council of Governments who attended recent workshops that would like to hold some more in their areas.
 - e. We have also been contacted by the City of Frisco to have workshop.
- g. TWRI will continue to contact watershed coordinators to discuss the best future date for workshops in their watershed.

100% Complete

Task 2.5: The Extension Program Specialist will work to establish 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 has sent program materials to potential CEU providers so that they can review the agenda and information and evaluate the program to the following:
 - a. Texas Water Resources Institute – 1 hour
 - b. Texas Floodplain Management Association – waiting for response
 - c. Texas Nutrient Management Planning Specialists – Approved for 6 hrs.
 - d. Texas Master Naturalists – approval required at the chapter level each time – approved for Lockhart training.
 - e. Texas Master Gardeners – approval required at the chapter level each time
 - f. Texas Forestry Association – approved for up to 6 hrs approved
 - g. Society of American Foresters – approved for up to 4.5 hrs
 - h. Texas Board of Architectural Examiners does not approve courses but said we should advertise as “Acceptable for HSW” – or good for State CE hours.
 - i. TWRI will coordinate with County Extension Agents in each county for Texas Department of Agriculture – Pesticide Applicators – approved for 3 hrs.
 - j. The program may also be used for CEUs for Professional Engineers.
 - k. Rangeland Management CEUs for the Riparian Proper Functioning Condition Courses were obtained for 8.5 CEUs for each 2-day session.

100% Complete

Task 2.6: TWRI/IRNR, with assistance of the Riparian Team, will actively market riparian education trainings through news releases (AgriLife News and local media outlets), internet postings, 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. TWRI advertised the workshops on the Websites and Facebook account.
- b. TWRI has developed the RSVP system online to track attendance at the workshops and continues to update it for each workshop.
- c. TWRI coordinated with watershed coordinators and county extension agents to develop press releases on each of the workshops to advertise them.
- d. TWRI advertised the Hickory Creek, Richland-Chambers Lake, and the two Riparian PFC Courses on the TRA listserv, post to the website subscribers, the Texas Watershed Coordinators listserv, and facebook.
- e. TWRI worked with the County Extension Agents and Watershed Coordinators and provided them the registration form and materials to advertise.
- f. TWRI developed a press release to advertise the Hickory Creek Richland-Chambers Lake, San Gabriel River and the two Riparian PFC Courses with the local county extension agents and watershed coordinators.

100% Complete

Task 2.7: TWRI/IRNR, with assistance of the Riparian Team, will deliver 25, daylong riparian education training events in prioritized watersheds (Subtask 2.4) during the project period. Five programs are planned for delivery in year 1 and 10 each year during years 2 and 3. Certificates of completion will be provided to all participants in the trainings.

The following actions have been completed during this reporting period:

- a. TWRI has been in contact with the watershed coordinators on the list of watersheds.
- b. Trainings have been conducted or scheduled with dates:
 - a. Plum Creek in Lockhart on June 25, 2013.
 - b. Leon River in Moody on Sept. 12, 2013.
 - c. Geronimo and Alligator Creek in Seguin on Sept. 17th, 2013.
 - d. WMHS Graduate Course in College Station on October 13, 2013.
 - e. Upper Llano River on October 16th, 2013.
 - f. TRA Junction Workshop on November 1, 2013.
 - g. Carters and Burton Creek on November 21, 2013.
 - h. Lavaca River Basin on February 25, 2014.
 - i. San Bernard River on March 18, 2014.
 - j. Arroyo Colorado on April 24, 2014.
 - k. Cedar Bayou on May 8, 2014
 - l. Upper Guadalupe River on May 13, 2013.
 - m. Double Bayou on September 24, 2014
 - n. Lower Nueces River on October 8, 2014
 - o. Petronila Creek on October 8, 2014
 - p. Oso Creek on October 8, 2014

- q. Eagle Mountain Lake on October 14, 2014
- r. Pedernales River on December 5, 2014.
- s. Dickinson Bayou on February 27, 2015
- t. Leon River on March 12, 2015
- u. Upper San Antonio River, April 1, 2015
- v. Cypress Creek in Wimberley on May 19, 2015.
- w. Hickory Creek in Denton on May 21, 2015.
- x. Richland Chambers in Waxahachie on June 2, 2015
- y. Professional PFC Workshop in Waxahachie on June 3-4, 2015
- z. Professional PFC Workshop in Belton on June 17-18, 2015
- aa. San Gabriel River in Georgetown on September 3, 2015
- c. No Upcoming Workshops/Complete

100% Complete

Task 2.8: TWRI/IRNR in collaboration with the Riparian Team will develop 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/IRNR, 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 is working to schedule presentations about the program to a variety of audiences including:
 - TWRI is presented at the August Watershed Coordinators Roundtable in San Marcos on the Riparian programs upcoming trainings.
 - TWRI presented at the Lavaca Navidad River Authority Clean Rivers Meeting for a 1 hour program on riparian and river systems near Edna, TX on July 30, 2015.
 - TWRI conducted a 45 min talk about Brazos Valley River and Riparian issues at the Brazos County Feral hog workshop for over 150.

100% Complete

Task 2.9: TWRI/IRNR will coordinate annual 2-day agency trainings on assessing proper functioning condition with the NRCS State Riparian Service Team. These programs will provide detailed training on proper functioning condition for agency personnel including TPWD, NRCS, CEAs, TSSWCB, TXDOT, TCEQ, SWCDs, GLO, TWDB, River Authorities, USFWS, and NPS personnel.

The following actions have been completed during this reporting period:

- a. TWRI had been coordinating with NRCS, TPWD, Texas A&M Forest Service and the TRA Board to prepare and advertise for a PFC Riparian Assessment Training to be held in Waxahachie, TX on June 3-4

- b. A second PFC and reschedule of the earlier one will be held in Belton, Texas on June 17-18, 2015.
- c. Advertising and registration was conducted for RSVPs for both trainings in June.
- d. Materials and RSVP are set up on the website.
- e. The first day was indoor classroom style presentations and the second day will be walking through the PFC Assessment in the field at two sites on creeks.
- f. These workshops were conducted with 25 attendees in Waxahachie and 31 attendees in Belton.
- g. Completed summarizing the evaluations for both.

100% Complete

Task 2.10: TWRI/IRNR 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/TRA managed the website, advertising, registration and planning of the Urban Riparian Symposium held in Austin February 11-13, 2015.
- b. Updated all of the information about the Urban Riparian Symposium on the website and opened up registration. The Symposium included 3 workshops on Feb. 11, two receptions, a Keynote and 2 plenary speakers, 47 concurrent sessions on a variety of topics dealing with stream and riparian issues. There were 213 attendees over the three days.
- c. More information about it can be found at <http://texasriparian.org>.

100% Complete

OBJECTIVE 3: CONDUCT DEVELOP WEB-BASED RIPARIAN EDUCATION PROGRAMS AND RESOURCES

To expand the reach and participation in the Riparian Education Program via web-based resources.

Task 3.1: Using non-federal funds from private foundations, the NRA will provide web-based, digital delivery of comprehensive riparian information through development of the Remarkable Riparian website. NRA will work with TWRI/IRNR and the Riparian Team to produce high quality audio-visual presentations, targeting both rural and urban audiences, for inclusion on the website. This will expand participation in riparian education programs by 1) supporting different adult learning styles and preferences, 2) providing flexible learning opportunities for interested citizens who have time and/or mobility constraints, and 3) enabling ready access to program resources statewide.

The following actions have been completed during this reporting period:

- a. NRA has updated materials and links on the remarkableriparian.org multiple times during the quarter.
- b. NRA is working on updating YouTube educational materials for the website and currently is drafting another short module on riparian issues for the website.
- c. NRA has created voice over powerpoint videos for the workshop presentations and they are on both the <http://www.remarkableriparian.org/> and <http://texasriparian.org/>.
- d. NRA has provided the Remarkable Riparian Publication at the Workshops.
- e. Worked with TWRI to post the voice over powerpoint youtube video presentation on *Riparian Considerations for Land Management Operations* at the Junction Riparian Education workshop to the TRA website.
- f. **You Tube Videos – Voice over PowerPoint Presentations**
 - 1. [Riparian and Watershed Management](#): Steve Nelle, Retired USDA Natural Resources Conservation Service
 - 2. [Stream Processes and Hydrology](#): Ryan McGillicuddy, Texas Parks and Wildlife Department
 - 3. [Riparian Vegetation and hindrances to Healthy Riparian Areas](#): Steve Nelle, USDA NRCS
 - 4. [Management Practices and Local Resources](#): Nikki Dictson, Texas Water Resources Institute
 - 5. [Riparian Considerations for Land Operators](#): Lori Hazel, Texas A&M Forest Service
- g. At the Corpus Christi Training for the three watersheds Nueces River Authority re-recorded 2 of the presentations for the voice over powerpoints and recorded the video of Steve Nelle explaining lanes balance.
- h. New powerpoint videos include:

Riparian Mini-Modules

[Lesson 1: Debunking the Myths](#) Nueces River Authority

Commonly held beliefs about riparian areas that are only partially true

[Lesson 2: Defining Riparian](#) Nueces River Authority

Riparian Area Defined, Where is it? What does it do?

[Lesson 3: Function Produces Values](#) Nueces River Authority

What area some of the values people expect from Riparian areas and what are the components of function that produce them.

[Lesson 4: How A River Works](#) Nueces River Authority

Concepts and Definitions; Base Flow/Bank Full, Flood Flow, Floodplain. How water moves in a channel and erosion and deposition processes

[Lesson 5: The Impacts of Channel Degradation](#) Nueces River Authority

Too Much Energy and Not enough energy dissipation can cause degradation and it can be predicted or interpreted using Lane's Balance

[Lesson 6: The Importance of Riparian Vegetation](#)

Nueces River Authority

Role of vegetation in riparian function and photographic evidence of recovery

[Lesson 7: What Hinders Function and Recovery](#)

Nueces River Authority

Photographic evidence of recovery and hindrances to recovery

[Lesson 8: Riparian Degradation and Recovery](#)

Nueces River Authority

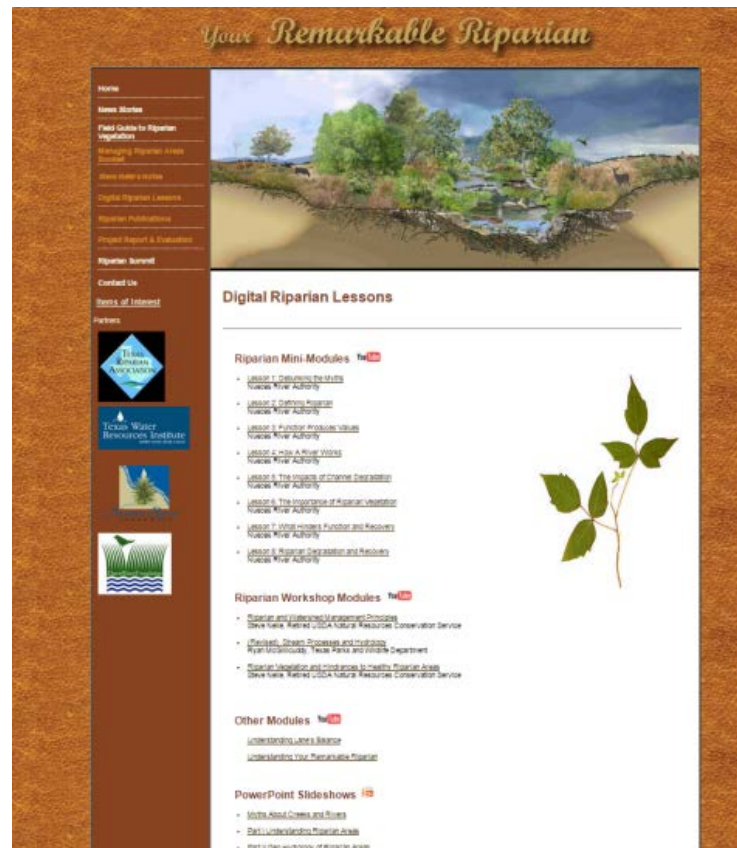
Visual examples of how rivers degrade and recover

[Understanding Lane's Balance for streams](#) – A

You Tube video with Steve Nelle explaining Lane's Balance.

[Understanding Your Remarkable Riparian Area](#) –

A webinar on You Tube featuring Sky Jones-Lewey of the Nueces River Authority that was sponsored by Texas Wildlife Association and AgriLife Extension Service in 2012.



100% Complete

Task 3.2: NRA will track usage of Remarkable Riparian website and report it with each quarterly report.

The following actions have been completed during this reporting period:

- a. Visitation counter installed on remarkableiparian.org: had a total of 2,898 visits recorded this quarter and 29,944 hits.

100% Complete

Task 3.3: The Nueces River Authority will also participate on Riparian Team assisting with development, marketing, and delivery of riparian landowner programs, annual conferences, and other trainings.

The following actions have been completed during this reporting period:

- a. NRA discussed strategies for development, marketing and delivery as well as website materials with TWRI during multiple calls and through correspondence during the quarter.
- b. NRA coordinated another printing of the Remarkable Riparian Publication.
- c. NRA provided the quarter web statistics to TWRI for inclusion in the report.
- d. NRA continues to stay in contact with TWRI about the project, workshops, and web based education.

100% Complete

OBJECTIVE 4: EVALUATE THE EFFECTIVENESS OF THE RIPARIAN EDUCATION TRAININGS AND WEB-BASED RESOURCES

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

Task 4.1: TWRI/IRNR will conduct pre- and post-training evaluations (for both group instruction and web-based trainings) 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. Additionally, TWRI/IRNR will deliver a follow-up assessment via email (6-month follow-up for both watershed-based and computer-based trainings) to ascertain behavior changes actually adopted by participants.

The following actions have been completed during this reporting period:

- a. TWRI has developed a set of questions based on the materials, a set of demographic questions and a survey of the program for the pre and post-surveys.
- b. TWRI conducted pre and post surveys at all of the Workshops including:
 - Plum Creek in Lockhart on June 25, 2013.
 - Leon River in Moody on Sept. 12, 2013.
 - Geronimo and Alligator Creek in Seguin on Sept. 17th, 2013.
 - Upper Llano River on October 16th, 2013.
 - TRA Junction Workshop on November 1, 2013.
 - Carters and Burton Creek on November 21, 2013.
 - Lavaca River Basin on February 28, 2014.
 - San Bernard River on March 18th, 2014
 - Arroyo Colorado on April 24, 2014
 - Cedar Bayou on May 8, 2014
 - Upper Guadalupe River on May 13, 2013.
 - Double Bayou on September 24, 2014
 - Lower Nueces River on October 8, 2014
 - Petronila Creek on October 8, 2014
 - Oso Creek on October 8, 2014
 - Eagle Mountain Lake on October 14, 2014
 - Pedernales River on December 5, 2014.
 - Dickenson Bayou on February 27, 2015.
 - Leon River on March 12, 2015
 - Upper San Antonio River April 1, 2015
 - Cypress Creek in Wimberley on May 19, 2015.
 - Hickory Creek in Denton on May 21, 2015.
 - Richland Chambers in Waxahachie on June 2, 2015
 - San Gabriel River in Georgetown on September 3, 2015.
- c. The post survey has been developed and reviewed and approved. It has been conducted for the workshops as the San Gabriel Workshop was conducted in the last

month of the project there is no post workshop online survey data included in the summary.

- d. Reminders for all of the past online trainings to complete the online evaluations were sent out so that the final numbers can be assessed for the final report.
- e. Post evaluations online were developed and conducted for the two PFC professional 2 day trainings.

100% Complete

Task 4.2: TWRI/IRNR will analyze results obtained from the pre-/post-tests and 6-month 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:

- a. All of the conducted workshop results have been compiled and analyzed.
- b. The workshop results have been analyzed through statistical software and the summary statistics have been written.
- c. This information has been included in the Annual Report and the Final Report.

100% Complete

Expected Work for the Next Quarter:

- Project is Complete

Watershed	Dates	Local Contacts	Affiliation	Acres Owned
Plum Creek Watershed	June 25, 2013	Nick Dornak	PCWP	*
Leon River	September 12, 2013	Mike Marshall/ Dickie Clary	Hamilton County	3920.7
Geronimo Creek Watershed	September 17, 2013	Ward Ling	AgriLife Extension	10152.7
Upper Llano River watershed	October 16, 2013	Tom Arsuffi	Texas Tech LRFS	7229.75
WMHS Graduate Course	October 1, 2013	Lucas Gregory	TAMU TWRI	*
TRA & TXSER Meeting	November 1, 2013	Dictson/Arsuffi	TRA & TXSER	*
Carters Creek	Nov. 21, 2013	Lucas Gregory	TWRI	9548.75
Lavaca Basin	Feb. 25, 2014	Allen Berthold/Joel Wagner	TWRI/ Wildlife Association	25373
San Bernard River Watershed	March 18, 2014	Aubin Phillips	H-GAC	10743.8
Arroyo Colorado	April 24, 2014	Jaime Flores	TWRI	2018
Cedar Bayou	May 8, 2014	Justin Bower	H-GAC	4049.5
Guadalupe River Above Canyon Lake	May 13, 2014	Tara Bushnoe/ Lauren Young	UGRA/TCEQ	6521
Double Bayou	September 24, 2014	Linda Shead	HARC/Shead Associates	2723.8
Lower Nueces	October 8, 2014	Rocky Freund/ Lauren Young	Nueces River Authority	17888
Petronila Creek	October 8, 2014	Rocky Freund/ Lauren Young	Nueces River Authority	17888
Oso Creek/Oso Bay	October 8, 2014	Teresa Carrillo	Coastal Bend Bays Foundation	17888
Eagle Mountain Lake	October 14, 2014	Tina Hendon	Tarrant Regional Water/ NRCS	6033
Pedernales River	December 5, 2014	Melissa / Katherine Romans/ Rachel Ranft	TPWD/ HCA/ TNC	*
Dickinson Bayou	February 27, 2014	Charriss York & Phoenix	AgriLife Extension	1109.25
Leon River	March 12, 2015	Mike Marshall/ Dickie Clary	Hamilton County	2983

Upper San Antonio River	April 1, 2015	Patty Carvajal/ Larry Berans	SARA	2590.85
Cypress Creek	May 19, 2015	Richard Parrish/ Meredith Miller	Meadows Center / AgriLife Extension	3753
Hickory Creek	May 21, 2015	David Hunter /Blake Alldredge	City of Denton / Upper Trinity Conservation	65402.1
Richland Chambers /Trinity River	June 2, 2015	Tina Hendon/NRCS	Tarrant Regional Water/ NRCS	846.415
San Gabriel River	September 3, 2015	Nat Waggoner/ Fred Hall	Georgetown & Williamson Agrilife Extension	1,843.4