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

Quarter no. <u>1</u> From <u>10/1/12</u> Through <u>12/31/12</u>

I. Abstract

In this initial quarter of the project work primarily focused on meetings with agency partners and confirming members of the Planning Team, setting up subcontracts with Nueces River Authority and Texas A&M Forest Service, and a contract kickoff meeting. Tasks also included updating webpages, gathering educational materials/presentations/evaluations, and visiting with some of the watershed coordinators about this program. To advertise the new program we have also scheduled to provide brief program presentations at several regional meetings. TWRI has kept in touch with the Riparian Team in these initials steps to move the project forward.

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 workplan was converted into the format of a QPR for the first quarter. The QPR for this first quarter will be submitted by the 1/15/13 date.

8% 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 will submit the first reimbursement forms at the end of this quarter.
- b. TWRI completed subcontracts with both Nueces River Authority and Texas A&M Forest Service.

8% 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:
 - TRA Board Meeting Teleconference on 10/22/2012.
 - TRA Annual Business Meeting on 10/26/2012 discussed this new project and the partnership with entire association who were totally onboard to partner and assist with this project including utilizing their website, partnering to coordinate annual meetings, participation on Planning Team of Board Members, etc.
 - NRCS in Temple on 12/13/2012.
 - TPWD on 12/17/2012 in San Marcos.
 - NRA discussion on website site map and organization 12/18/2012.
 - All of the team members have been contacted by TWRI over the quarter to discuss the program and confirm their membership on the Riparian Team.
 - Riparian Kickoff Meeting with TSSWCB, NRA, and TFS on 12/19/2012.

8% 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.
 - Nikki Dictson is scheduled to present a brief presentation on the new program at the TSSWCB Southeast and South Central Texas Regional Watershed Coordination Steering Committee Meeting for March 7, 2013 in Columbus.
 - Nikki Dictson is scheduled to present a brief presentation on the new program at the GBRA 2013 Clean Rivers Program Basin Steering Committee Meeting on March 21, 2013.

8% 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 materials website as a part of the Texas Riparian Website – texasriparian.org and the TWRI/IRNR trainings website will manage all of the training RSVPs and registrations.

b. These websites will be coordinated and linked to RemarkableRiparian.org website that will be managed by Sky Lewey - Nueces River Authority and will have the online educational delivery as discussed in Task 3.

8% 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. 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/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*. Please See Attached Team List.

10% 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 has been compiling presentation materials from past Extension presentations, from Dr. Jabar's workshops, NRA's workshops, Texas Riparian Associations Workshops, and Texas Parks and Wildlife Department's Workshops. These presentations will be the basis and be utilized in the new workshops as appropriate.
- b. Workshop agenda's from these other partners have also been gathered to assist with coming up with the program agenda.
- c. Stream Assessment and Field Guides have also been gathered and are being evaluated to assist with workshop presentations.

10% 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 has coordinated with TSSWCB on an intial list of watersheds that includes additional watersheds to the ones listed above.
- b. TSSWCB has requested input on any additional watersheds from TCEQ.
- c. The list of initial watersheds has been shared with members of the riparian team and once receive additional input from TCEQ and receive some priorities of the list we will start scheduling trainings in those higher priority watersheds.

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. We have drafted a list of some potential CEU providers that we will have review the curriculum once it is finalized for CEUs.
- b. TWRI will continue to look into additional CEUs for the program.

8% 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. No activity to report during this quarter.

0% 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. No activity to report during this quarter.

0% 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:
 - Nikki Dictson is scheduled to present a brief presentation on the new program at the TSSWCB Southeast and South Central Texas Regional Watershed Coordination Steering Committee Meeting for March 7, 2013 in Columbus.

- Nikki Dictson is scheduled to present a brief presentation on the new program at the GBRA 2013 Clean Rivers Program Basin Steering Committee Meeting on March 21, 2013.
- b. TWRI will continue to work on presentations of differing lengths about the program to submit for approval.

8% 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 met with NRCS personnel including Susan Baggett and Russell Castro in Temple about these trainings and on instructors at the landowner trainings on December 13, 2012. NRCS is very excited about partnering to conduct these workshops.
- b. TWRI met with TPWD personnel on December 17th, 2012 about partnering with us and NRCS to conduct these trainings each year.

8% 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 has initiated discussions on holding an annual meeting in partnership with the Texas Riparian Association and Nueces River Authority in October/November 2013.
- b. TWRI is also coordinating a Riparian Workshop for the Southwest US Stream Restoration Conference to be held in San Antonio on May 28. The conference will run May 28-30.

8% 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 Organized framework and existing riparian education tools on remarkableriparian.org. Framework is attached.

8% 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 remarkableriparian.org: 855 visits recorded this quarter.

8% 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. Participated in contract kickoff meeting on 12/19/2012 and website/marketing meeting in the afternoon on 12/19/2012.
- b. NRA discussed strategies for development, marketing and delivery with TWRI during multiple calls and through correspondence during the quarter.

8% 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 started compiling other example pre- and post-training evaluations to model these assessments after for the Riparian Trainings.
- b. Examples from TAMU Rangeland Extension Water Programs, Texas Watershed Stewards, and TWRI's training programs have been compiled.

8% 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. Nothing to report during this quarter.

0% Complete

Expected Work for the Next Quarter:

- TWRI will continue to work on drafts of educational materials for review of the team.
- TWRI and NRA will continue to develop the websites for the program and the online educational tools.
- TWRI will submit draft program brochure for review.
- TWRI will draft evaluations from the compiled examples from other programs for review.
- TWRI will develop brief presentations for a variety of audiences and specifically for the upcoming regional meetings that have been scheduled in March.
- As soon as watershed priorities are determined TWRI will start scheduling workshops in those watersheds.
- TWRI will schedule a Riparian Planning Team Meeting to discuss materials.

Appendix A: Riparian Planning Team Members

Riparian Team				
First	Last	Org.	Phone	Email
Blake	Alldredge	AgriLife Extension	979.845.0916	balldredge@tamu.edu
Kevin	Anderson	TRA/Austin	512.972.1960	kevin.anderson@ci.austin.tx.us
Tom	Arsuffi	Texas Tech - LRFS	512-407-9357	tom.arsuffi@ttu.edu
Russell	Castro	USDA NRCS	254-742-9982	russell.castro@tx.usda.gov
Nikki	Dictson	TAES	979-458-5915	n-dictson@tamu.edu
Gary	Garrett	TPWD	830-866-3356 ext212	Gary.Garrett@tpwd.state.tx.us
Wesley	Gibson	TSSWCB	254-773-2250, 240	wgibson@tsswcb.texas.gov
Thom	Hardy	MCWE, Texas State University	512-245-6729	Thom.Hardy@txstate.edu
Fouad	Jabar	AgriLife Extension	972-952-9672	f-jabar@tamu.edu
Sky	Lewey	NRA	830-278-6810	slewey@nueces-ra.org
Georgianne	Moore	TAMU ESSM	979.845.3765	gwmoore@tamu.edu
Steve	Nelle		325.944.0147	nelleangelo@suddenlink.net
Melissa	Parker	TPWD	512-754-6844 ext.235	melissa.parker@tpwd.state.tx.us
Anne	Rogers	TRA	512-459-4471	anrogers1111@gmail.com
Hughes	Simpson	TFS	936-639-8180	HSimpson@tfs.tamu.edu
Kevin	Wagner	TWRI	979-845-2649	klwagner@ag.tamu.edu
Peter	McKone	TCU/Atkins	817-946-7379	peter.mckone@atkinsglobal.com
Bill	Carter	TCEQ	512-239-6771	bill.carter@tceq.texas.gov

Appendix B: Initial List of Watersheds for the Program

Watershed	Counties		
Buck Creek Watershed	Childress, Collingsworth and Donley Counties		
Cedar Creek Watershed	Henderson, Kaufman, Rockwall and Van Zandt Counties		
Dickinson Bayou	Brazoria and Galveston Counties		
Geronimo Creek Watershed	Guadalupe and Comal Counties		
Gilleland Creek	Travis County		
Hickory Creek	Denton County		
Lampasas River Watershed	Bell, Burnet, Coryell, Hamilton, Lampasas, Mills, and Williamson Counties		
Little Cypress Creek Watershed	Harris County		
Pecos River Watershed	Crane, Crockett, Pecos, Reeves, Terrell, Upton, and Ward Counties		
Plum Creek Watershed	Caldwell, Hays, and Travis Counties		
San Bernard River Watershed	Austin, Colorado, Wharton, Fort Bend, and Brazoria Counties		
Upper Llano River watershed	Edwards, Kerr, Kimble, Menard, Real, and Sutton Counties		
Cedar Bayou			
Arroyo Colorado			
Trinity River			
Double Bayou			
Leon River			
Lower Nueces			
Big Cypress Creek Basin - LOP			
Attoyac Bayou			

Appendix C:NRA's RemarkableRiparian.org Site Map

Site Map for Riparian Digital Network: remarkableriparian.org

Team/Role:

Sky Lewey, NRA – Project director and content oversight development of 8 Lessons per Site Map via motion graphics, graphics, photos, voice over narration; Key animations: HDR and Lane's Balance

Kevin Reese, NRA - Project technology advisor, plus possible TWRI staff?

Mary Kate Rogers, NRA – Vector illustrations for Healthy/Degradation/Recovery (HDR) animation White Hat Creative/Karen Ford – possible creative copy develop/edit with Kevin Greenblat – design consultation

Other sub-contractor(s) – digitizing Plant Field Guide (85 plants), SQL database Content consultants/partners: Steve Nelle, Kevin Wagner, Nikki Dictson

RR SITEMAP

HOME PAGE

Text (welcome, about site)

Healthy/Degradation/Recovery animation (click on image to play)

Side bar (news/calendar of workshops, events; changes regularly via site manager)

ABOUT US

Text about NRA, program partners, funding partners (with hot links to other sites) (NRCS, National Riparian Service Team, TPWD, TWRI; plus funders)

Your RR: SHORT COURSE

Text on how to use the lessons for teaching/learning

Lesson One: Pre-Test (myths incorporated in to these questions)

10 questions/pages with photo images

(NOTE: all lessons below delivered as simple short 2-3 min. animations with VO narration)

Lesson Two: What is Riparian?

Text/VO: define

Photographic images/visualization

Graphic/images: cog, sponge, watershed to water catchment

Discussion Guide: text

Lesson Three: Function Produces Values

Text/VO/Graphics/Photos

Lesson Four: How a Stream/Creek/River Works

Base Flow/Bank Full, Flood Flow

Importance of Floodplain (dissipating energy, catching sediment, holding water)

How water moves in a channel - corkscrew, cut and deposit

Cut bank and point bank

Lesson Five: Impacts of Channel Degradation

Down cut channel, water table lowers

Stream on bedrock, overly wide channels

Causes of degradation

Lane's Balance animation

Lesson Six: Vegetation is Key

Role of vegetation, cog graphic

Lane's Balance animation showing vegetative buffer

Photographic evidence

Sponge graphic

Link to Riparian Plan Field Guild

Lesson Seven: What Hinders Function?

Text and photographic imagery

- Farming too close to the bank
- Mowing, spraying close to the creek
- Manicured landscapes next to the creek
- Grazing concentrations in creek areas
- Excessive deer, exotics, hogs in creek areas
- Burning in riparian area
- · Removal of large dead wood
- Artificial manipulation of banks / sediment
- Excessive vehicle traffic in creek area
- Poorly designed road crossings / bridges
- Excessive recreational foot traffic in creek area
- Excessive alluvial pumping or other withdrawals

Lesson Eight: The Degradation and Recovery Process

Healthy/Degradation/Recovery animation with audio explanation

Your RR: WORKSHOP (THE LONG COURSE)

(Note: Developed by NRA/TWRI as workshop in three parts using ppt/VO via camtasia)

Part One: Understanding Riparian Areas Part Two: Geo Hydrology of Riparian Areas

Part Three: Riparian Vegetation

KEY RESOURCES

Text and links to:

Nelle's Notes (lives on site)

TWA Webinar (link to off site)

Remarkable Riparian Summit presentations & proceedings (lives on site)

Guide for Building Community Along a Creek (the NRA example; to be written,

Includes link to NRA's Riparian Landowner Network brochure

NRA Riparian Landowners Network, Project Report by Oregon State University

Executive Summary

Full Report

NRA Final report to TPWD

PUBLICATIONS & NEWS STORIES

Content is list of 8-10 on site story pages and off-site links

FIELD GUILDE TO RIPARIAN PLANTS (NRA book)

Text introduction to book & plants

Searchable online database of 85 plants

Search by common plant name, Genus/species, category, functionality Each plant includes name, photo, wetland indicator, stability rating, text about Guided observation tool

CALENDAR OF EVENTS

Text and listings of upcoming workshops, training events, conferences of interest (Note: this will be an area for regular content management by site manager.)

LINKS

Text/list of other online sites for more information