Texas Watershed Planning Training Project CWA 319(h) NPS Grant Program TCEQ Contract No. 582-11-12866

Quarter no. <u>1</u> From <u>6/1/11</u> Through <u>8/31/11</u>

I. Abstract

The project was kicked-off this quarter following the initiation of the contract on June 30, 2011. Following contract initiation, the budget was allocated to Texas AgriLife Extension and Texas Water Resources Institute (TWRI) and accounts set up on July 27, 2011. In addition to a contract kick-off conference call, work this quarter primarily focused on coordinating and organizing the July 2011 Stakeholder Facilitation Training and Texas Watershed Coordinator Roundtable. Also, TWRI worked with the planning team to update the agenda for the next offering of the Texas Watershed Planning Short Course. The short course will be conducted next quarter and other efforts will focus on planning for the January 2012 Roundtable.

II. Overall Progress and Results by Objective and Task

OBJECTIVE 1: PROJECT COORDINATION AND ADMINISTRATION

Task 1.1: Project Oversight – TWRI will provide technical and fiscal oversight of the staff and/or subgrantee(s)/subcontractor(s) to ensure Tasks and Deliverables are acceptable and completed as schedule and within budget. With the TCEQ Project Manager authorization, TWRI may secure the services of subgrantee(s)/subcontractor(s) as necessary for technical support, repairs and training. Project oversight status will be provided to TCEQ with the Quarter Progress Reports (QPRs).

The following actions have been completed during this reporting period:

a. TWRI Project Manager contacted Bill Jarocki formerly with the Environmental Finance Center at Boise State University, now with Voltaic Solutions, to continue to present at the Short Course on "Sustaining Watershed Groups for Implementation Success"

10% Complete

Task 1.2: QPRs – Progress will be reported to TCEQ by the 15th of the month following each state fiscal quarter for incorporation into the Grant Reporting and Tracking System (GRTS). The Reports are to include the following: status of deliverables for each task; narrative description in Progress Report format.

The following actions have been completed during this reporting period:

a. TWRI submitted Year 1, Quarter 1 Progress Report on September 15, 2011.

10% Complete

Task 1.3: Reimbursement Forms – Reimbursement forms will be submitted to TCEQ by the last day of the month following each state fiscal quarter. For the last reporting period of the project, Reimbursement Forms are required on a monthly basis.

The following actions have been completed during this reporting period:

- a. The contract was initiated on June 30, 2011.
- b. The budget was allocated and accounts set up on July 27, 2011.
- c. No reimbursement forms have been submitted for this period.

0% Complete

Task 1.4: Contract Communication – TWRI will participate in a post-award orientation meeting with TCEQ within 30 days of contract execution. TWRI will maintain regular telephone and/or email communication with the TCEQ Project Manager regarding the status and progress of the project in regard to any matters that require attention between QPRs. This will include a call or meeting each January, April, July, and October. Minutes recording the important items discussed and decisions made during each call will be attached to each QPR. Matters that must be communicated to the TCEQ Project Manager in the interim between QPRs include:

- Requests for prior approval of activities or expenditures for which the contract requires advance approval or that are not specifically included in the scope of work
- Notification in advance when TWRI has scheduled public meetings or events, or other major task activities under this contract

Information regarding events or circumstances that may require changes to the budget, scope of work, or schedule of deliverables; these events or circumstances must be reported within 48 hours of discovery.

The following actions have been completed during this reporting period:

- a. TWRI participated in a post-award contract orientation meeting via conference call on July 6, 2011 with TCEQ Project Manager, TCEQ Contract Specialist, TWRI Business Coordinator, and Texas AgriLife Contracts and Grants staff. The following items were discussed:
 - Contract terms and conditions
 - Contract amendment and minor changes
 - Scope of Work and Schedule of Deliverables
- b. Detailed meeting minutes are attached in Appendix A, in addition to the revised Schedule of Deliverables
- c. TWRI received approval of the post-award meeting minutes from TCEQ on July 19, 2011 (letter included in Appendix A).

10% Complete

Task 1.5: Annual Report Article – TWRI will provide an article for the Nonpoint Source (NPS) Annual Report upon request by TCEQ. This report is produced annually in accordance with Section 319(h) of the Clean Water Act (CWA), and it is used to report Texas' progress toward meeting the CWA 319 goals and objectives and toward implementing its strategies as defined in the Texas Nonpoint Source Management Program. The article will include a brief summary of the project and describe the activities of the past fiscal year.

The following actions have been completed during this reporting period:

a. The Texas Watershed Planning Training article for the NPS Annual Report – along with photos and captions was sent to TCEQ on August 10, 2011. Article and photos included in Appendix B.

33% Complete

OBJECTIVE 2: MAINTAIN WEB-BASED WATERSHED PLANNING RESOURCES FOR TEXAS WATERSHED COORDINATORS

Task 2.1: Watershed Training Webpage – TWRI will host and maintain an Internet website for information sharing and use by watershed coordinators (http://watershedplanning.tamu.edu).

The following actions have been completed during this reporting period:

- a. TWRI Program Coordinator met with TWRI website developer on July 25, 2011 to update the watershed training website to portray information for the new project. The "projects" tab was updated to include:
 - Texas Watershed Planning Project II (and related materials)
 - Texas Watershed Planning Project I (and related materials)
- b. To view the updates visit: http://watershedplanning.tamu.edu/projects
- c. There were 402 unique visitors to the watershed training website during this quarter.

10% Complete

Task 2.2: Maintain Directory of Watershed Resources – TWRI will coordinate with the EFC at Boise State University to maintain the Directory of Watershed Resources with data for Texasspecific funding programs. The Director of Watershed Resources is an on-line, searchable database for watershed restoration funding. The database includes information on federal, state, private, and other funding sources and assistance. This will allow Texas users to query information in a variety of ways including agency sponsor, keyword, or by a detailed search.

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

Task 2.3: Report on the Maintenance of Web-based Watershed Planning Resources for Texas Watershed Coordinators – TWRI will submit a report detailing activities conducted under Task 2 during the current contract.

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

OBJECTIVE 3: CONDUCT WATERSHED PLANNING SHORT COURSE

Task 3.1: Organize and Deliver 3 WPSC Events – TWRI will continue to coordinate and offer WPSC annually. To accomplish this, TWRI with assistance from the Project Team, will identify key speakers for the course, make arrangements for facilities, advertise the WPSC, conduct registration, and facilitate the delivery of three (3) Texas WPSCs to a total of 80-120 water resource professionals in Texas and the surrounding region. Certificates will be provided to participants upon completion of the course. A registration fee of \$375 will be charged to WPSC participants. One WPSC Scholarship will be offered per year to assist those who lack funds to attend the WPSC. TWRI will work closely with TCEQ and the Project Team to assess the need for and timing of these short courses to best meets the needs of the state. As needed, travel for speakers will be paid for through project funds.

The following actions have been completed during this reporting period:

- a. On May 13, 2011, TWRI Project Manager and TWRI Program Coordinator met with Texas AgriLife Extension Specialist in regards to potential changes and updates to the Short Course agenda.
- b. Major changes were not made as the agenda was primarily reviewed. It was noted that two instructors would no longer be able to assist with the Short Course: Dr. Bruce Lesikar who left Texas AgriLife Extension Service and Jen McDonnell who left her position at Tetra Tech.
- c. TWRI Program Coordinator contacted the Mayan Ranch for potential Short Course dates; the planning team and instructors were emailed a few possible dates to choose from for the next offering of the Short Course. The group opted for November 14-18, 2011
- d. Registration was opened June 2011 and there are 10 registrants to date.
- e. On Wednesday, August 17, a conference call was held to discuss necessary changes to the Short Course agenda which included the addition of new presentations (meeting summary notes can be found in Appendix C).

10% Complete

Task 3.2: Administer Questionnaires and Evaluations – TWRI will oversee the administration of questionnaires and evaluations to gauge the knowledge gained and how effective the course was for each course participant. Questionnaires will be administered at the beginning and end of selected short courses to demonstrate the course's effectiveness and to identify areas needing adjustment. Evaluations will be completed at the end of each short course to receive comments and participant input and also determine watersheds represented and new WPPs initiated by participants at the short course.

The following actions have been completed during this reporting period:

b. No activity to report this quarter.

0% Complete

Task 3.3: Report on Watershed Planning Short Course Task – TWRI will provide a report detailing the WPSC held and associated activities conducted under Task 3.

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

OBJECTIVE 4: PROVIDE PROFESSIONAL DEVELOPMENT TRAINING

Task 4.1: Organize and Deliver "Introduction to Modeling" Training – A two-day course will be developed by TWRI and Texas A&M University System personnel in years 1-2 and delivered in subsequent years of the project to provide watershed coordinators with an introduction to watershed modeling. Development is year 1 and 2. Delivery is year 2 and 3. Topics of the course will include (1) purposes and limitations of different models, (2) timelines, (3) data needs (watershed characterization, water quality information), (4) cost estimates, (5) literature values vs. monitoring, (6) Quality Assurance Project Plans (QAPPs), (7) request for bids, (8) presenting models to stakeholders, and (9) contractor interaction with stakeholder groups. The course registration fee is to be determined.

The following actions have been completed during this reporting period:

- a. TWRI Project Manager and Program Coordinator met with Dr. R. Srinivasan on August 5, 2011 in regards to setting up a planning meeting for the Introduction to Modeling Training.
- b. TWRI Program Coordinator will work to set up a conference call time (October 2011) to include TCEQ, Srini, Larry Hauck (TIAER), TSSWCB and R. Karthikeyan (TAMU) to further discuss an outline for the training and build upon discussions of the preliminary Aug. 5th meeting:
 - What should be included in the training (per Task 4.1)
 - Training location (central Texas)
 - Training timeline (day 1 and day 2)
 - 15-20 participants and registration fee

10% Complete

Task 4.2: Organize and Deliver Training on Watershed modeling using LDC and SELECT – LDCs provide a graphical representation of stream flow and pollutant loading whereby real data can be compared to a stream's maximum allowable load to indicate reductions needed and help identify the type of pollutant load (i.e. point source vs. NPS). SELECT provides a spatially explicit analysis of land use/land cover, animals/humans in watersheds, and other parameters to assess/determine potential sources of bacteria. The models are being used for Total Maximum Daily Load (TMDL) and WPP development. A two-day course will be developed and delivered in subsequent years of the project. A \$100 registration fee will be charged for these two-day courses.

The following actions have been completed during this reporting period:

a. No activity to report this quarter as Dr. Karthikeyan (training instructor) has been out of the country. Will work to set up planning meeting with him next quarter.

0% Complete

Task 4.3: Organize and Deliver Training on Stakeholder Facilitation — Stakeholder facilitation continues to be identified by watershed coordinators as a training need in Texas. To provide this, TWRI will deliver 2 day-long trainings on stakeholder facilitation. A \$30 registration fee will be charged for the stakeholder facilitation programs.

The following actions have been completed during this reporting period:

- a. TWRI Project Manager worked with Charlie MacPherson to set up the first Stakeholder Facilitation Training in conjunction with the July 2011 Texas Watershed Coordinator Roundtable.
- b. TWRI Program Coordinator worked with Charlie MacPherson to compile and print course materials.
- c. Training was held on July 26, 2011 at the Lower Colorado River Authority in Austin with 42 participants.
- d. TWRI Program Coordinator emailed evaluation summary results and related training materials (per the Schedule of Deliverables) to TCEQ Project Manager on August 10, 2011. Summary notes and participant list can be found in Appendix D.
- e. In addition, dates for the next Stakeholder Facilitation Training were discussed and it will tentatively be held in conjunction with the January 2012 Roundtable.

50% Complete

Task 4.4: Organize and Deliver Training on Water Quality Monitoring – Training will be developed by TWRI and others and will cover monitoring for (1) watershed characterization and (2) evaluation of water quality improvements and BMP effectiveness from implementation activities. Topics of the training will include: data quality objectives; identifying available data; determining data gaps and needs; monitoring plan development to meet data quality objectives and support modeling; selecting monitoring types, locations, equipment and laboratory analysis; obtaining stakeholder input; developing QAPPs for monitoring and acquiring data; and a workshop portion for collaboratively creating monitoring plans. The course(s) will be developed in years 1-2, and a minimum of one course per year will be delivered in subsequent years.

The following actions have been completed during this reporting period:

- a. TWRI Project Manager and Program Coordinator met (via conference call) with Dr. Larry Hauck (TIAER) to discuss date and participants for the first planning team meeting/conference call to discuss the training and development.
- b. The first planning team meeting/conference call was held on September 7, 2011 to discuss the training purpose; course topics/outline; and workshop materials. Meeting agenda and summary notes can be found in Appendix E.

10% Complete

Task 4.5: Administer Questionnaires and Evaluations –TWRI will oversee the administration of questionnaires and evaluations to gauge the knowledge gained and how effective the course was for each course participant. Questionnaires will be administered at the beginning and end of each course to demonstrate the course's effectiveness and to identify areas needing adjustment.

The following actions have been completed during this reporting period:

a. TWRI administered questionnaires and evaluations to Stakeholder Facilitation Training participants on July 26, 2011. TWRI Program Coordinator emailed detailed results to TCEQ Project Manager on August 10, 2011. Summary Notes of these results can be found in Appendix D.

50% Complete

Task 4.6: Report on Professional Development Trainings Provided –TWRI will submit a report detailing professional development trainings provided and associated activities conducted under Task 4.

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

OBJECTIVE 5: ORGANIZE AND FACILITATE TEXAS WATERSHED COORDINATOR ROUNDTABLES

Task 5.1: Facilitate Watershed Coordinator Roundtables – TWRI will coordinate with TCEQ, TSSWCB and EPA to organize and facilitate a total of six (6) semi-annual Watershed Coordinator Roundtables. These face-to-face Roundtables will build upon the fundamental knowledge conveyed through the WPSC and establish a continuing dialogue between watershed coordinators in order to facilitate interactive solutions to common issues being faced by watershed coordinators statewide. Periodically, TWRI, in conjunction with TCEQ and the Project Team will review the continued need for semi-annual Roundtables as well as their specific timing.

The following actions have been completed during this reporting period:

- a. A Roundtable was held January 25, 2011. This Roundtable was originally scheduled to be within the contract period; however, contracting delays at TCEQ meant that the Roundtable was held outside of the contract period. No reimbursement was made for this Roundtable. Materials are posted online (http://watershedplanning.tamu.edu/developing/roundtable)
- b. In February 2011, TWRI Project Manager corresponded with TCEQ, EPA, and TSSWCB via email and phone to discuss potential speakers and dates for the July 2011 Texas Watershed Coordinator Roundtable.
- c. It was decided, based on January 2011 evaluation results, the Roundtable would be on July 27, 2011 at the Lower Colorado River Authority in Austin and focus on Bacteria Dynamics, Assessment Methods, and BMPs.
- d. 107 participants were in attendance. The Roundtable agenda can be found in Appendix F. The participant list, summary notes, as well as videos of each presentation and presentations can be found online at: http://watershedplanning.tamu.edu/developing/roundtable/july-27-2011.

10% Complete

Task 5.2: Administer Evaluations – TWRI will oversee the administration of evaluations to gauge the knowledge gained and how effective the Roundtable was for each participant. Evaluations will be administered at the end of each Roundtable to determine future topics of discussion.

The following actions have been completed during this reporting period:

a. Participant evaluations were compiled and emailed to TSSWCB, TCEQ, and EPA on August 5, 2011 (Appendix F).

10% Complete

Task 5.3: Report on the Texas Watershed Coordinator Roundtables – TWRI will submit a report detailing Texas Watershed Coordinator Roundtable meetings provided and associated activities conducted under Task 5.

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

OBJECTIVE 6: SUBMIT FINAL REPORT

Task 6.1: Draft Report

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

Task 6.2: Final Report

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 of Unusual Developments

• Nothing to report at this time.

IV. Projected Work for Next Quarter

- Continue to advertise the Texas Watershed Planning Short Course in November.
- Continue contacting Short Course instructors/presenters and making travel/lodging arrangements.
- Prepare Short Course materials (manual; certificates; handouts; etc.)
- TWRI will prepare and submit Year 1, Quarter 2 Progress Report.
- TWRI will schedule and conduct a meeting with project participants to discuss project activities and progress.

Appendix A

Post-Award Contraction Orientation Meeting Minutes	10
Revised Schedule of Deliverables	18
Minutes Approval Letter from TCEQ	20

Texas Commission on Environmental Quality Nonpoint Source Program

Contract No. 582-11-12866 Post-Award Contract Orientation Meeting TWRI Texas Watershed Planning Training Project

July 6, 2011 (9:30-10:30 a.m.) Conference Call

Goal: Ensure clear and mutual understanding of all contract terms and conditions and the respective responsibilities of all parties.

MINUTES

1. Introductions

Program has funded this project before; therefore conducting kick-off conference call

Contract staff need through Item 4

2. Project Personnel - Roles and Responsibilities

Lauren Bilbe: TCEQ Nonpoint Source Program; will serve as the Project Manager

Mary Beth Leihardt: TCEQ Contract Specialist for the Nonpoint Source Program; will process all invoices and amendments

Kevin Wagner: TWRI Project Manager overseeing project

Courtney Smith: TWRI Program Coordinator; assisting with project and all trainings

Sarah Seidel: TWRI Business Coordinator; handles project budget Atin Agrawal: Contracts & Grants; responsible for post-award services

Connie Currin: Contract & Grants; billing supervisor

3. Project Description

a. *Major Task Overview:* Provide tools, training and coordinator opportunities for watershed planners and coordinators statewide to ensure consistent, high quality watershed plans are developed and implementation and water quality improvements are achieved and sustained.

Task 1: TWRI will provide project oversight and administration; quarterly reports to TCEQ; contract communications with detailed minutes to TCEQ;

Task 2: Maintain Web-based Watershed Planning Resources for Texas Watershed Coordinators –Continue to maintain and update Texas Watershed Planning website – Continue to work with Environmental Finance Center at Boise State University to

maintain and update Directory of Watershed Resources; online, searchable database for watershed restoration funding

Task 3: Conduct Watershed Planning Short Course

- -Organize and deliver 3 Texas Watershed Planning Short Courses; training up to 120 water resources professionals on the development and implementation of watershed protection plans
- -Administer questionnaires pre- and post-course to gauge knowledge gained and identify areas needing adjustment -Administer course evaluation

Task 4: Provide Professional Development Training (8 additional trainings)

-Introduction to Modeling training -Training on Watershed Modeling using

LDC and SELECT -Stakeholder Facilitation Training -Water Quality

Monitoring Training -Administer questionnaire and evaluations

Task 5: Organize and Facilitation Texas Watershed Coordinator Roundtables – Continue to facilitate Roundtables; build on knowledge conveyed at Short Course – Continuing dialogue between watershed coordinators

Task 6: Final Report *Task 5 and 6 became a little intermingled – but clear within subtasks

b. *Associated Costs:* Sarah: Costs will be to pay people working on the project; honorariums to speakers; travel expenses (Short Courses; Roundtables; Trainings) –Subcontracts: Tetra Tech; TIAER – Tarleton State University; EFC Boise State University

(possible change)

-Workshop Manuals: \$10,000 to manual development and printing

4. Contract Terms and Conditions

a. Contract Period

Lauren: 6/30/2011 through 8/31/2013 (can bill starting 6/30/11) The schedule of deliverables does not fall within contract period (says through month 28 but we only have 26 months in the contract)

Mary: Revise schedule of deliverables via email (noting different dates); not an amendment. Email between Lauren and Kevin.

Lauren: Quarterly billing process: would like monthly billing for the last month of the contract (Quarter 4 of 2013); to ensure funds are spent. Lauren can assist with methods to ensure spending down the funds occurs towards the end.

b. Payment Procedures

i. Financial Status Report

Mary: easier for auditing purposes to only have one FSR

Lauren: what could serve as your tracking for your match (instead of a second FSR) could be the banking spreadsheet

Connie: agrees to one FSR and banking spreadsheet

Sarah: Would like an example (from TCEQ) of specific info to be in the banking spreadsheet (Lauren/Mary will send an example)

Lauren: overall Indirect rate for contract is 25% but what can actually be billed to TCEQ is 15% (difference is unrecovered IDC reporting as cost-share)

ii. Allowable costs

Mary: Everyone familiar with allowable costs; no questions

iii. Matching funds

Sarah: \$375/participant goes into local account (Texas AgriLife); use these funds to pay salaries (TCEQ provides funds for expenses); use registration fees as match; cannot start match right away because we have not completed a course yet

Mary: We've been instructed by upper management that invoices that come in must have 60/40 match; we won't be able to process them if they are not exactly 60/40.

If the first invoice cannot come in as 60/40, just note that to us and bill us when you can meet the 60/40; You can over-match, you cannot under-match

Sarah: We were told in the past it has to be exact; difficult with salaries and fringe to do exact when we don't know our federal expenses for each month

Lauren: Suggests TWRI starts a spreadsheet tracking your match (C&G currently does) and you only bill what is needed for the 40%; keep a banking spreadsheet (how much match you have in the bank; how much you have billed to TCEQ; how much remains); submit with billing

Strongly recommends just bill 60/40 and not over-match; It's okay if you bill back your match to a previous quarter to count it (as long as it's within the contract period)

For the first quarter, you can only bill the federal portion that you have match available for.

iv. Personnel Eligibility List **Lauren:** need an up to date personnel eligibility list

Mary: if it changes from quarter to quarter you can send the list in when you send in the billing invoices

c. Contract Amendment and Minor Changes Mary: Send budget revisions (if moving budget categories) with invoice. If budget revision is over 10% of total contract; then we do have to do an amendment.

Lauren: Amendments do take a while; if needed, we need to know at least a quarter ahead of time

Mary: Extensions to the contract or changes to the Scope of Work are signed by the section manager. If we are moving funds or adding additional funds, the threshold of signature level goes higher (time consuming)

Sarah: For budget revisions less than 10%, send the budget revision request to C&G to send with the invoice to TCEQ. They will review, approve and email the PDF back to me and I can facilitate changes with C&G. For budget revisions greater than 10%, send the budget revision request to C&G to send with the invoice to TCEQ. TCEQ will process formal amendment.

Lauren: Minor changes include the Schedule of Deliverables; changes to individual tasks that do not substantially change the obligation of our contract; transfers that do not exceed 10% of the total budget.

Amendments includes: total amount to fund; changes to the contract that change TWRI's obligation to TCEQ and TCEQ's obligation to EPA.

d. Intellectual Property Lauren: this is essentially any item, deliverable, education material – TCEQ and EPA has the right to reproduce. TWRI must secure intellectual rights. Use your own photos; make sure TCEQ/EPA can reproduce these materials.

Example: dog poop poster, photo did not have intellectual property rights for, created a legal battle

e. Project Representatives

Lauren: Change needed on project representative, Dr. B. L. Harris, who is retiring

Mary: This can be done as a minor change. Mary will fill form in with new information and send back to TWRI. Email is fine to say we have a new project representative for new

contract. Send to TCEQ via email with their contact info.

f. Project Budget

Lauren: pretty much covered budget; any questions about budget at this point?

Atin: No questions since C&G will receive detailed budget with contract

g. Acknowledgement of Financial Support

Lauren: stated in the contract under federal conditions; publications produced – need statement "prepared in cooperation with TCEQ and US EPA"

h. Disadvantage Business (DBE)/Historically Underutilized Business (HUB)

Mary: I don't know that any new contracts that we start doing are going to be required to supply us with the HUB form any longer. Everyone is familiar with DBE and the goals we try to meet agency-wide (there were no questions).

5. Scope of Work and Schedule of Deliverables

Project Goals
Measures of Success

Lauren: EPA is now reviewing our final reports; our project officer, Leslie, is now specifically looking to see how we measure against our goals and measures of success (in final report).

Do not just say "we did all of our tasks" and "deliverables are complete" but how have we met the intent/goal of the project.

Kevin: We'll make sure we'll track these things throughout the project and include in the final report.

Lauren: Noticed an error in the Scope of Work: "... 10 additional training opportunities will be provided ..." and we only have 8 additional trainings; however does not think this is something we need to worry about as its pretty laid out in the rest of the contract.

c. Tasks Lauren: detailed meeting minutes (as outlined in task 1) need to be submitted; essentially this is what we talked about; document agreements

Planning meetings in the past: Want to get a feel for past meetings and planning meetings with this project.

Kevin: plan to continue annual planning meetings; needs to discuss with one additional person and will have a planning meeting to discuss the Short Course.

For the Roundtable, continue to pull in EPA and TSSWCB periodically to discuss what specifically we want at the Roundtables.

Lauren: Agrees to pull in these other agencies. Can also coincide with our quarterly meetings.

Kevin: Can conduct in such a way to count for both.

Lauren: What about the River Systems Institute

Kevin: Jason Pinchback and his group will be involved in the Short Courses (like in the past) and also provide input in the Monitoring Training. They will not be a subcontractor on this one.

d. Schedule of

Deliverables Lauren: will

need to revise

Kevin: We should be able to meet everything in here with this time frame. He has talked to Monica Harris and Clyde Bolhmfalk. Monica said although we can't grant you an extension that is certainly a possibility with this project. We'll have a Short Course in Fall 2011, Fall 2012 and Spring of 2013.

Charlie MacPherson's training will be provided at the end of month one and possibly month 13.

Will discuss with other subcontractors in regards to training courses; we plan on 12 month development and then trainings after (we can do them as early as 6 months a part OR one in month 12; on in month 24)

He will visit with Sarah about this project in regards to doing this in a 2-year time frame with a 3-year budget (in consultation with Lauren)

Lauren: discuss again in a year to make sure we have plenty of time and are not sweating it at the end.

6. Training/Roundtable Planning Lauren:

Will be on vacation at the end of July

Texas Watershed Planning Training Project Schedule of Deliverables

Task No.	Deliverable	Due Date
1.1	Project oversight status	Quarterly with QPRs
1.2	Quarterly Progress Reports (QPRs)	The 15 th of the month following each state fiscal quarter
1.3	Quarterly Reimbursement Request Forms	The last day of the month following each state fiscal quarter. For the last reporting period of the project, reimbursement forms are required on a monthly basis.
1.4	Post Award Meeting	Within 30 days of contract execution
1.4	Post Award Meeting Minutes	Within 15 days of Post Award Meeting
1.4	Quarterly conference call or meeting with the TCEQ Project Manager & Minutes	The second month of each state fiscal quarter
1.5	Project Annual Report Article	Upon request by TCEQ
2.1	Watershed Training Webpage	Status provided with QPRs
2.2	Maintain Directory of Watershed Resources	Status provided with QPRs
2.3	Report on the Maintenance of Web-based Watershed Planning Resources for Texas Watershed Coordinators	Month 25
3.1	Watershed Planning Short Courses held – one per year	Month 5, 15, 20
3.1	Course agenda and materials	30 days prior to training event
3.1	List of only new participants completing the short courses;	60 days after training event
3.2	Summary of questionnaire and evaluation results from participants	60 days after training event

3.3	Report on the Watershed Planning Short Course Task	Month 25	
4.1	"Introduction to Modeling" Training – held one per year in years 2 and 3	Month 16, 25	
4.2	Watershed modeling training using LDC and SELECT	Month 16, 25	
4.3	Stakeholder Facilitation Training —one per year in year 1 and 2	Month 1, 12	
4.4	Water Quality Monitoring Training - developed year one, held one per year in years 2 and 3	Month 16, 25	
4.1 – 4.4	Course/training notices, agendas, and materials	30 days prior to training event	
4.1 – 4.4	List of participants completing the various short courses, workshops, and trainings	60 days after training event	
4.5	Summary of questionnaire and evaluation results from participants	60 days after training event	
4.6	Report on Professional Development Trainings Provided	Month 25	
5.1	Watershed Coordinator Roundtables - five (5) held semi- annually, two per year	Month 1, 7, 13, 19, 25	
5.1	Meeting notices, agendas, and additional materials	30 days prior to training event	
5.1	List of participants for each Roundtable	60 days after training event	
5.1	Summaries of discussion held at Roundtables	60 days after training event	
5.2	Summary of evaluation results from participants	60 days after training event	
5.3	Report on the Texas Watershed Coordinator Roundtables	Month 25	
6.1	Draft Final Report	Month 25	
6.2	Final Report	Month 26	

Bryan W. Shaw, Ph.D., Chairman
Buddy Garcia, Commissioner
Carlos Rubinstein, Commissioner
Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 19, 2011

Kevin Wagner, Associate Director Texas AgriLife Research Texas Water Resources Institute 1500 Research Parkway, Suite A240 College Station, TX 77843-2118

[DELIVERED VIA EMAIL]

Re: Contract 582-11-12866, Contract Post-Award Meeting Minutes, Task 1.4

Dear Mr. Wagner:

On July 19, 2011, the TCEQ received an electronic copy of the Contract Post-Award Meeting Minutes with TCEQ comments addressed. The document was reviewed by TCEQ staff and is accepted as meeting the requirements and intent of this deliverable under Task 1.4.

Thank you for submitting the above referenced deliverable. If have any questions, please feel free to contact Lauren Bilbe at (512) 239-1764 or lauren.bilbe@tceq.texas.gov.

Sincerely,

Kerry Niemann

Team Leader, NPS Team

Office of Water

Attachments:

CC: Courtney Smith, Texas AgriLife

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Appendix B

FY 11 NPS Annual Report Article – TX Watershed Training Project

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Texas Watershed Planning Training Project

Watershed efforts continue to grow in Texas supported by the Texas Commission on Environmental Quality, Texas State Soil and Water Conservation Board, U.S. Environmental Protection Agency, and a growing network of watershed coordinators and water professionals. This group of water professionals assembles biannually through Texas Watershed Coordinator Roundtables. Texas Watershed Coordinator Roundtables, organized by the Texas Water Resources Institute, provide a forum for establishing and maintaining dialogue between watershed coordinators and facilitate interactive solutions to common watershed issues faced throughout the state. Nearly 200 water professionals attended the two Texas Watershed Coordinator Roundtables held in Temple and Austin in 2011. Topics discussed included stakeholder involvement and facilitation; and bacteria dynamics, assessment methods, and best management practices.

To further support watershed efforts in the state, a variety of training opportunities have also been made available to watershed coordinators and other water professionals. In July 2011, a Stakeholder Facilitation Training was held in conjunction with the Texas Watershed Coordinator Roundtable in Austin. The Stakeholder Facilitation Training highlighted tools used to effectively identify, engage, and involve stakeholders throughout a watershed to restore and maintain healthy environmental conditions. More than 40 watershed coordinators and water resource professionals attended the Stakeholder Facilitation Training. Other training opportunities to be offered include the weeklong Texas Watershed Planning Short Course and an additional Stakeholder Facilitation Training. Courses being developed include an Introduction to Modeling training; training on the use of Load Duration Curves and the Spatially Explicit Load Enrichment Calculation Tool; and instruction on water quality monitoring.

These efforts are supported by a collaborative project between the Texas Water Resources Institute, Texas AgriLife Extension Service, Texas AgriLife Research, Texas Commission on Environmental Quality, Texas Institute for Applied Environmental Research, Texas State Soil and Water Conservation Board, and U.S. Environmental Protection Agency. Through funding from the Texas Commission on Environmental Quality and U.S. Environmental Protection Agency, it is the goal of this project to provide tools, training, and coordination opportunities for watershed planners and coordinators throughout Texas to ensure consistent, high quality plans are developed and implementation and water quality improvements are achieved and sustained.

For more information on Texas Watershed Coordinator Roundtables and upcoming training opportunities for watershed planners and water professionals, as well as guidance on watershed planning, see the Texas Watershed Planning website http://watershedplanning.tamu.edu/>.





Photos included: (from left) Participants at the Stakeholder Facilitation Training on July 26, 2011 at the Lower Colorado River Authority in Austin, Texas are brainstorming audience-specific messages and ideas to assist with engaging stakeholders in the watershed protection planning process. Participants at the Texas Watershed Coordinator Roundtable on July 27, 2011 at the Lower Colorado River Authority in Austin, Texas are listening to topics on bacteria dynamics, assessment methods, and best management practices.

Appendix C

August 17, 2011 Planning Team Meeting – Short Course

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Texas Watershed Planning Short Course – Conference Call to Discuss Agenda Wednesday, August 17 @ 9:30 a.m.

Summary Notes

Participants: Lauren Bilbe, TCEQ Larry Hauck, TIAER

Kevin Wagner, TWRI Aaron Wendt, TSSWCB
Courtney Smith, TWRI Nikki Dictson, TAES

EPA: Mike Bira, Leslie Rauscher, Randy Rush, Tina Hendon

Major Changes to Agenda:

• **Ken Banks:** no longer under travel restrictions; can include his Hickory Creek presentation back in the agenda

- **Jen McDonnell:** no longer with Tetra Tech; provide a handout with additional information in regards to her Internet tools presentation
- **Dr. Ed Rister:** can provide an economics perspective on Clint Wolfe's Cedar Creek case study
- Chris Canavan: he is with the New Mexico Environment Department; has expressed an interest in presenting on 319 planning in New Mexico
- Mel Vargas: he is with Parsons; has expressed an interest on presenting in regards to triple bottom line analysis and building trust among stakeholders

Suggestions/Additions to Agenda

- Economics panel: consisting of Dr. Ed Rister; Ken Banks; Bob Adair
- Proceed with adding Canavan and Vargas to agenda
- Received permission from Tetra Tech to develop handout based on McDonnell's presentation

Revised agenda will be sent via email to Project Team for any further changes

TWRI Program Coordinator will confirm additional speakers and new topics for agenda

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Stakeholder Facilitation Training – Participant List	27





Stakeholder Facilitation Training July 26, 2011

Questionnaire & Evaluation Summary Results

A total of 42 participants attended the Stakeholder Facilitation Training on July 26, 2011 at the Lower Colorado River Authority Complex. The training, conducted by Charlie MacPherson of Tetra Tech, Inc. was from 9 a.m. to 4 p.m. and highlighted the following key concepts:

- Identifying driving forces
- Forming a stakeholder group
- Differentiating between positions and needs
- Keeping the process moving forward
- Dealing with conflict and hidden agendas
- Making decisions using a consensus-based approach

A questionnaire was administered prior to the start of the training to gauge what participants hoped to gain with the training; their greatest challenges in working with stakeholders; tools and methods currently used to engage stakeholders; and current level of stakeholder response.

Based on the 23 questionnaires received, participants hoped to learn new ideas and better tips for engaging stakeholders; ways to keep stakeholders engaged; in addition to preparations for meetings with stakeholders. Many listed that their greatest challenges with stakeholders are gaining trust and keeping them engaged and informed.

An evaluation was administered upon completion of the training to determine if the training met their expectations; as well as valuable and least valuable aspects of the training. Of the 34 evaluations received, 23 participants rated the training a 4 out of 5 (workshop met expectations). Participants indicated that they increased their knowledge and gained new ideas of stakeholder facilitation and engagement. They also stated that the group activities and open discussions were very helpful, allowing them to hear what other watershed coordinators are doing statewide.

The following pages include detailed comments from the pre-questionnaire and post-evaluations received.



Stakeholder Facilitation – Participant List

First Last Agency/Organization		Email			
Ashley	Alexander	Texas State Soil and Water Conservation Board	aalexander@tsswcb.state.tx.us		
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Jack	Higginbotham	Texas Commission on Environmental Quality	jack.higginbotham@tceq.texas.		
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Danielle	Kalisek	Texas Water Resources Institute	dmkalisek@tamu.edu		
Brian	Koch	Texas State Soil and Water Conservation Board	bkoch@tsswcb.state.tx.us		
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Roger	Miranda	Texas Commission on Environmental Quality	roger.miranda@tceq.texas.gov		

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Chip Morris		Texas Commission on	chip.morris@tceq.texas.gov		
		Environmental Quality			
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		Environmental Quality			
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		Conservation Board			
Carol	Wickware		carol.pappas@live.com		
	Pappas				
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		Environmental Quality			
Arthur	Talley	Texas Commission on			
		Environmental Quality			
Clyde	Bohmfalk	Texas Commission on			
		Environmental Quality			

Appendix E

Water Quality Monitoring Training - Meeting Agenda	30
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Water Quality Monitoring Training

Planning Meeting

Wednesday, September 7, 2011
10 a.m. to 12 Noon
Blackland Research and Extension Center, Temple

Training Purpose: cover monitoring for (1) watershed characterization and (2) evaluation of water quality improvements and BMP effectiveness from implementation activities

I. Course Topics & Outline

- a. Data quality objectives
- b. Identifying available data
- c. Determining data gaps and needs
- d. Monitoring plan development to meet data quality objectives and support modeling
- e. Selecting monitoring types, locations, equipment and laboratory analysis
- f. Obtaining stakeholder input
- g. Developing QAPPs for monitoring and acquiring data
- h. Workshop portion for collaboratively creating monitoring plans

II. Workshop Materials

a. Manuals, handouts, presentations

III. Workshop Timeline

a. Tentative workshop #1: July 2012

b. Tentative workshop #2: June 2013

c. Workshop locations

IV. Additional Comments

Water Quality Monitoring Training

Planning Meeting

Wednesday, September 7, 2011
10 a.m. to 12 Noon
Blackland Research and Extension Center, Temple

SUMMARY NOTES

Participants:

TIAER: Anne McFarland, Larry Hauck

EPA: Leslie Rauscher, Henry Brewer, Tina Hendon, Mike Schaub

TSSWCB: Aaron Wednt

TCEQ: Kerry Niemann, Lauren Bilbe, Allison Woodall TWRI: Kevin Wagner, Allen Berthold, Courtney Smith

USDA-ARS: Daren Harmel

I. Course Topics & Outline: one day to 1 ½ day training; target the same group that attends the Roundtables; have some background/basic knowledge. Provide emphasis on watershed

characterization, BMP effectiveness.

- a. How this folds into watershed based plans; reaffirm with participants tie back to watershed-based planning efforts
- b. Data quality objectives
- c. Identifying available data
- d. Determining data gaps and needs
- e. Monitoring plan development to meet data quality objectives and support modeling
- f. Selecting monitoring types, locations, equipment and laboratory analysis
- g. Obtaining stakeholder input
- h. Developing QAPPs for monitoring and acquiring data
- i. Workshop portion for collaboratively creating monitoring plans
- EPA: should add an overview of the 305b process
- TCEQ: could require participants attend a Texas Watershed Stewards training
- TWRI: build in smaller portion of field time; training near suitable field site

Possible Speakers:

- Larry Hauck/Daren Harmel: introduction and demonstrations
- Ken Banks: demonstration

- Anne McFarland: statistical tools
- QAPP Person (TCEQ or EPA staff)

II. Workshop Materials

- Manuals, handouts, presentations: provide expertise contact list(s); presentations;
 budgeting price lists from 2/3 labs across the state; publications on monitoring; USDA
 & EPA monitoring documents
- b. No more than 40 participants

III. Workshop Timeline

- a. Tentative workshop #1: Fall 2012 (possibly November)
- b. Tentative workshop #2: June 2013
- c. Workshop locations: Stephenville; Austin/San Marcos; Salado (Stagecoach Inn); Bandera

**IV. Additional Comments **

 a. TWRI Program Coordinator will summarize meeting notes; potential locations; and draft outline of agenda based on discussion – will email to the planning team for feedback in October 2011

Appendix F

Texas Watershed Coordinator Roundtable - Agenda			
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Texas Watershed Coordinator Roundtable "Bacteria Dynamics, Assessment Methods, and BMPs"

July 27, 2011 9:30 a.m. — 3:30 p.m.

LCRA Dalchau Service Center, Austin, Texas

9:30 – 9:40 a.m. Welcome & Introductions [Kevin Wagner, Texas Water Resources Institute]

9:40 – 9:50 a.m. Stakeholder Questions Regarding Bacteria [Mel Vargas, Parsons]

9:50 – 10:40 a.m. Effect of Fish and Wildlife on Bacterial Levels

- The role of fish as sources and vectors of bacteria and the influence of bat colonies on indicator bacterial levels [Dr. George Guillen, Environmental Institute of Houston, University of Houston—Clear Lake]
- Evaluation of fecal indicator bacteria loadings from a wildlife point source and sediment resuspension in inland streams [Dr. Michael Barrett, Department of Civil, Architectural, and Environmental Engineering, University of Texas]

10:40 – 11:00 a.m. Networking Break

11:00 – 11:50 a.m. Environmental Effects on Bacterial Survival and Growth

- Fate and transport of *E. coli* in rural Texas landscapes and streams [Dr. Saqib Mukhtar, Department of Biological and Agricultural Engineering, Texas A&M University]
- Relationship between Bacteria and Conventional Water Quality Parameters
 [Dr. Hanadi Rifai, Civil and Environmental Engineering Department,
 University of Houston]

11:50 – 12:30 p.m. Catered working lunch (or bring your own) [RSVP required]

12:30 – 1:20 p.m. Methods for evaluating bacteria sources and loads

- Comparison of *E. coli* methods [Emily Martin, Soil and Aquatic Microbiology Lab, Texas A&M University]
- Arroyo Colorado Bacteria Indicator Study [Rocky Freund, Nueces River Authority]

1:20 – 2:10 p.m. Effect of management and land use on bacterial concentrations and loading

• Effects of ag management, land use, and watershed scale on *E. coli* concentrations [Dr. Terry Gentry, Soil and Crop Sciences Department, Texas

A&M University]

• Effects of fencing, alternative water, grazing management, and other ag BMPs on bacteria loading [Kevin Wagner, Texas Water Resources Institute]

2:10 – 2:30 p.m. Networking Break

2:30 – 2:55 p.m. Bacterial Regrowth

• Effect of carbon on bacterial regrowth [Dr. Jacqui Peterson, Soil and Crop Sciences Department, Texas A&M University]

2:55 – 3:15 p.m. Roundtable discussion of implications of research findings to watershed planning and implementation [Facilitated by Mel Vargas, Parsons]

- How do these findings affect your watershed planning efforts?
- What are other questions regarding bacteria (i.e. current research needs)?

3:15 – 3:30 p.m. Wrap-Up [Kevin Wagner, Texas Water Resources Institute]

- State Bacterial Source Tracking Conference
 - o February 28-29, 2012 at T Bar M in New Braunfels
- Upcoming training opportunities
 - o Texas Watershed Steward Program
 - o Next Texas Watershed Planning Short Course
 - o Next Roundtable (January 2012)
- Other Announcements

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Participant Evaluations

January 25, 2011

*(53) evaluations received (107 participants)	Poor	Fair	Good	Excellent	Notes
What was your overall satisfaction with the Roundtable?	1	2	22	27	(1 - no answer)
Will the information presented in the Roundtable help you?	2	5	21	24	(1 - no answer)

Please list dates we should avoid in January 2012 for the next Roundtable:

Jan. 1-5;

Jan. 7-31;

Jan. 1-15;

Jan. 12-17; Jan. 20 & 23;

1st week; MLK week; last week; end of Jan.; Tuesdays & Thursdays;

Possible Date: Wednesday, January 25, 2012

*will pair Stakeholder Facilitation Training with this Roundtable

*Charlie is avail. any day after Jan. 15

Please list any recommendations for the next Roundtable location:

(5 -- LCRA Austin - this is an excellent location and space; this location was the best so far - perhaps it could be here again if they can get the catering right; this location; great facility)

Other suggestions: Devils River State Natural area; McKinney Roughs; River Systems Institute; SAWS or UTSA in San Antonio; Baylor Science Blg. in Waco

(20 -- No Answer)

Possible Location: College Station or San Antonio

*ask Lucas about free CS locations

Participant Evaluations

January 25, 2011

What topic(s) is (are) most valuable to you?

(*user comments are somewhat grouped together -- separated by semicolons)

BMP selection and implementation results; BMPs; Effectiveness of BMPs and land use practices on bacteria levels; Land use/E. coli relationship and BMP effects; BMP effectiveness, LID, education and outreach; Comparison of E. coli methods (Emily Martin), effects of fencing (Kevin Wagner); Discuss rotational/time managed grazing vs. conventional grazing as a BMP -- discuss soil health (mircoorganisms, etc.) as the building blocks of a health watershed;

- (3 -- BST methods); BST experimental design & practice; BST info and research topics presented; BST and E. coli data, data collection systems and methods;
- (6 -- Bacteria fate, transport); Bacterial survival and growth; Indicator organisms' effectiveness and enumeration techniques;

Overall questions remaining relating to the variability of bacteria and its sources; Bacteria fate and life span in different water temps, soils and urban streams; Bacteria - fate, transport, from animal types & contribution from birds; General update on different areas of new bacteria research; Bacteria and emerging issues on EPA radar - what will be the next big issue in water quality

(3 -- Effects of wildlife, regrowth); Wildlife, fisheries and bacterial loading, fencing/grazing BMPS; Wildlife contribution of *E. coli*; Avian, fish, and agricultural sources of bacteria; Sources of bacteria from fish/bats/birds; Wildlife contributions to water quality - background level estimates/BMP effectiveness or lack of;

Urban area case studies (e.g., birds under bridges); Birds/bridges, carbon presentation; Talks on effects of ag management; Management practices and effectiveness;

WPP as a basis for satisfying TMDL;

Kevin Wagner's presentation over LSHS BMPs; Hanadi, Wagner, Mukhtar; (2 -- Dr. Rifai's study); Public health;

None, good job by Vargas to try to stimulate dialogue; All of them are of beneift; All topics have been useful and will help; All have provided new information to me; All -- but wish it could have been over 2-days;

(5 -- No Answer)

Participant Evaluations

January 25, 2011

What topic(s) should have been addressed (or addressed more thoroughly)?

(*user comments are somewhat grouped together -- separated by semicolons)

(5 -- BST methods); Source tracking, sediment; Coliform methods, false positives, methods bacterial selectivity; More about bacteria from aquatic life; OSSF's, Active watershed plans dealing with bacteria; Addressing bacteria problems in urban areas and how to solve them; Bacterial and conventional WQ parameters; Upcoming assessments, new indicators - benefits vs. costs to implement; Sediment bacteria holding; Bacteria fate in tidal or brackish streams; Appropriate indicators;

Impact of BMPs on reducing bacterial levels or specific bacteria types/sources; (2 -- BMP effectiveness); Monitoring in watershed protection plans; Case studies for developing load reduction estimates for specific BMPs; Impacts of agricultural bacteria (cattle, swine, poultry); BMPs that address bacteria; Practical aspects of managing BST; Urban BMPs; Point source, urban runoff;

Other potential techniques i.e. stable isotopes; More about *E. coli*, biology, discuss enterocci too and marine work - more genetic background; Need to get into analyses methods/models/data quality if inherent variability etc.; Sampling methods;

Eduation/outreach of this information to stakeholders/citizens in the watersheds;

Robin Brinkemeyer (TAMU-G) also looked at nutrients and carbons as limiting factors for bacterial regrowth;

All were covered too remedially; Thought subjects were covered well; This was very informative; Everything was great; Good range of topics; (2 -- Allow more for Q&A); All were addressed thoroughly given the time constraints; I am not very familiar with bacteria, so all topics were helpful, although some were over my head;

Mr. Vargas appears to be very biased;

(13 -- No Answer)

Participant Evaluations

July 27, 2011 Austin

Please list any recommendations or suggestions for the next Roundtable:

Updates on RUAA's across the state and TCEQs adoption of them; How to form tropical storms over Texas; How MS4 permits can be updated to incorp. WPP elements; Implications of nutrient standards on streams being developed by TCEQ;

Sediment/erosion control - addressing urban problems with water; More technical discussions; Bioassessment; Nutrients/algae; BST methods & influence on new technologies, speakers from other universities;

BMP effectiveness monitoring; Modeling to develop load estimates and evaluate BMP effectiveness, urban case studies for BST; Presentation of BMPs used in current WPPs - what has worked; We need more info on bacteria - concerned most about Entero; EPA Epidemiological Study; Any studies relating to *E. coli* concentrations to actual pathogen existence/concentrations; Drought/water quantity issues; Discuss how to get meaningful reductions in bacteria or changes in water quality standards that reflect natural stream conditions during rainfall events; Implementing study results and BMPs or steps to move forward in reducing bacteria from known sources;

Would like to see WPP effectiveness evaluation - edge of field to watershed scale; Successful implementation of TMDLs, managing urban runoff; WAP Process; Watershed Planning and Implementation (coordination) - better management of the microphone to ensure audience can hear questions/answers;

(4 -- Types of stakeholder education and outreach programs - real examples); Include some of the more completed/advanced or matured studies; Public Health; Discuss further how to get info and circulate; Re-engaging stakeholders;

Everything was good; Keep the research coming, good work; More food; You guys always do a great job; I heard they ran out of food, I would correct that; More time for presentations and discussions/questions; Thank you for keeping on schedule; Longer lunch; Watershed Short Course Reunion; Vegetarian friendly; Agenda was too crowded -- didn't leave room for discussion; More time for Q&A - have at least 1 round table in the room; Need more network time (make 2-day);

(14 -- No Answer)