

**Texas Watershed Planning Short Course**  
**CWA 319(h)**  
**TCEQ Agreement No. 582-7-77049**

Quarter no. 4 From 12/1/07 Through 2/29/08

**I. Abstract**

This has been a very active quarter for the project. On January 28-February 1, 2008, the *Applied Fluvial Geomorphology (AFG) Short Course* was held. Forty-four personnel from TPWD, TCEQ, TXDOT, TFS, Texas AgriLife Extension Service, and TWRI participated. Participant's overall satisfaction with the course was excellent. Much time and effort went into coordinating this, but it was well worth it. The final agenda for the *Texas Watershed Planning Short Course* was also completed this quarter. All speakers have been confirmed and arrangements have been made with the Mayan Dude Ranch and Conference Center for June 2-6. Registration for the course opened on February 8<sup>th</sup> and to date, 18 have registered. The Texas River Systems Institute (RSI) has been subcontracted to assist with this course. TWRI is also working with the Texas Institute for Applied Environmental Research (TIAER) to initiate a subcontract to secure TIAER staff as speakers for all three short courses. The Watershed Planning Short Course Webpage (<http://watershedplanning.tamu.edu/>) has been visited by a total of 337 visitors since it went online. It will continue to be updated as new material is developed for the course. Next quarter, final preparations will be made for the Short Course. Presentations will be compiled, the questionnaire developed, and the materials for the assignments organized. Registration will continue throughout the quarter until the class size of 40 is reached. Registrations that come in after the max is reached will be placed on a waiting list for the next course offering.

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

**OBJECTIVE 1: PROJECT COORDINATION AND ADMINISTRATION**

*Task 1.1: Team Organization – TWRI will assemble a team made up of university, TCEQ, TSSWCB, EPA, TCE and Texas River Systems Institute personnel, along with EPA trained Watershed Coordinators, to guide the development and delivery of the Texas Watershed Planning Short Course to water professionals throughout Texas. This team will meet quarterly to discuss project status, provide input, and coordinate project activities. Quarterly meetings will consist of face-to-face meetings, teleconferences, and TTVN meetings as appropriate.*

The following actions have been completed during this reporting period:

- a. On January 22<sup>nd</sup>, the fifth Planning Team meeting was held via conference call for the sole purpose of finalizing the short course agenda. Representatives from the EPA, TCEQ, TSSWCB, TSU-River Systems Institute, and TWRI participated in the meeting. Final comments were incorporated following the conference call so that the agenda could be sent out one last time to the Planning Team for final review.

**50% Complete**

*Task 1.2: Project Coordination – TWRI will coordinate the project with other ongoing watershed efforts including, but not limited to the Southern Region Water Quality Coordination Project, TSSWCB Wharton Regional Office Watershed Coordination Project, TCE Watershed Stewardship Program, and TCEQ TMDL Program.*

The following actions have been completed during this reporting period:

- a. Texas AgriLife Extension Service (Extension), formerly TCE, is a member of the planning team and has been subcontracted to assist with the Short Course, ensuring coordination with the Watershed Stewardship Program and Southern Region Water Quality Coordination Project.
- b. TSSWCB is a member of the planning committee and has participated in all planning team meetings. Extension and TWRI regularly participate in the TSSWCB Wharton Regional Office Watershed Coordination Project, further ensuring coordination.
- c. TWRI continues to work with Louanne Jones and Arthur Talley to gain input and coordination from the TCEQ TMDL Program.

**50% Complete**

*Task 1.3: Quarterly Progress Reports – TWRI will prepare electronic quarterly progress reports (QPRs) for submission to the TCEQ, TSSWCB, EPA, and all members of the team. QPRs will be submitted 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 (1) Status of deliverables for each objective and (2) Narrative description in Progress Report format.*

The following actions have been completed during this reporting period:

- a. TWRI submitted Year 1, Quarter 3 Progress Report on December 15, 2007.

**50% Complete**

*Task 1.4: Project Oversight – TWRI Project Manager will provide technical and fiscal oversight to ensure Tasks and Deliverables are acceptable and completed as scheduled and within budget. With TCEQ Project Lead authorization, TWRI may secure the services of contractors as necessary. Project oversight status will be provided with the Quarterly Progress Status Reports. In addition, TWRI will attend meetings with project manager and other meetings, as needed, to review project status, deliverables, etc.*

The following actions have been completed during this reporting period:

- a. On February 11, 2008, the RSI subcontract was signed and fully executed. This \$30,000 subcontract (\$18K federal & \$12K non-federal) secured the assistance of the RSI with program development and delivery from December 1, 2007 – Aug 31, 2009.
- b. A subcontract with the Texas Institute for Applied Environmental Research (TIAER) in the amount of \$4,708 has been drafted and is under review by Texas A&M Contracts and Grants. This subcontract will provide funding for Dr. Larry Hauck to deliver presentations on data gathering, modeling, and effectiveness monitoring at each of the three short courses.

**50% Complete**

*Task 1.5: Reimbursement Forms – TWRI will submit appropriate Reimbursement Forms (2 copies), purchase vouchers (269a, and 269a 1-4) and Small and/or Minority Owned Business Report (where applicable) by the last day of the month following each state fiscal quarter.*

The following actions have been completed during this reporting period:

- a. The second invoice in the amount of \$6,268.79 and covering the period of September 1, 2007 – November 30, 2007 was submitted in December 2007. The total project funds expended as of the end of November 2007 were \$19,833.68 (10% of total federal funds available). The next invoice, covering expenses from December 2007 through February 2008 will be submitted in March 2008.

**10% Complete**

*Task 1.6: Contractor Evaluation – TWRI will participate in Contractor Evaluation.*

The following actions have been completed during this reporting period:

- a. The Contractor Performance Evaluation Report for year 1 was submitted to TCEQ on September 10, 2007 covering the period of 2/15/07 – 8/31/07.

**33% Complete**

## **OBJECTIVE 2: DEVELOP TRAINING MATERIALS AND EDUCATIONAL PROGRAM FOR WATERSHED PLANNING SHORT COURSE**

*Task 2.1: Compile and Summarize Existing Programs – TWRI will collect and compile information about existing training programs.*

The following actions have been completed during this reporting period:

- a. Information on existing programs was compiled and discussed with the planning team during the first and second quarters. No further work is planned.

**100% Complete**

*Task 2.2: Develop Training Program – As directed by the TCEQ and Project Team, TWRI will modify existing training programs, such as the EPA Watershed Training Materials and those found as a result of subtask 2.1, to fit the needs of Texas professionals.*

The following actions have been completed during this reporting period:

- a. The Final Short Course agenda (attached) was completed in February 2008. Over the 4-day course, 34 presentations by 16 speakers will be made. There'll be 5 assignments in addition to a pre- and post-test and survey. The list of instructors includes such national experts as Charlie MacPherson with Tetra Tech, Stuart Lehman with EPA HQ, Bill Jarocki with the NW Environmental Finance Center, Tom Davenport with EPA Region 5, and Jeff Thornton with the SE Wisconsin Regional Planning Commission.

**90% Complete**

*Task 2.3: Watershed Training Webpage – TWRI will develop (Months 1-3), host, and maintain (Months 3-36) an internet Web site for information sharing and use by short course participants.*

The following actions have been completed during this reporting period:

- a. TWRI has developed the Website (<http://watershedplanning.tamu.edu/>) for information sharing and use by short course participants.
- b. The website was viewed by 42 unique visitors in December 2007.
- c. The website was viewed by 75 unique visitors in January 2008.
- d. The website was viewed by 82 unique visitors in February 2008.
- e. To date, the website has been viewed by a total of 337 unique visitors.

**50% Complete**

### **OBJECTIVE 3: CONDUCT WATERSHED PLANNING SHORT COURSE AND OTHER WATERSHED TRAINING**

*Task 3.1: Organize Short Course Events – TWRI will identify key speakers for training, make all arrangements for facilities, advertise the short course, conduct registration, and make all travel arrangements for speakers. Travel for speakers will be fully paid for through project funds.*

The following actions have been completed during this reporting period:

- a. The first *Watershed Planning Short Course* is set for June 2-6, 2008.
- b. Sixteen speakers have been identified to assist with the training including: Kevin Wagner, Stuart Lehman, Randy Rush, Aaron Wendt, Charlie MacPherson, Nikki Dictson, Larry Hauck, Ann Kenimer, Brad Lamb, Daren Harmel, Roger Miranda, Walter Rast, Tom Davenport, Eric Mendelman, Jeff Thornton, and Bill Jarocki.
- c. The conference center and a block of 50 rooms have been reserved at the Mayan Ranch in Bandera for the June 2-6 short course.
- d. TWRI sent out a flyer and registration information to the invited participants on February 8, 2008. To date, 18 have registered for the first course.
- e. Information was sent on February 22, 2008 to all speakers regarding travel arrangements and reimbursement procedures.

**35% Complete**

*Task 3.2: Deliver Short Course – TWRI will facilitate the delivery of the Texas Watershed Planning Short Course to 120 water professionals in Texas and the surrounding region, providing certifications to participants. A \$350 registration fee will be charged to short course participants. As funding and need allow, additional offerings of the course will be considered.*

The following actions have been completed during this reporting period:

- a. The first course will be held June 2-6, 2008.

**0% Complete**

*Task 3.3: Organize Applied Fluvial Geomorphology Short Course Event – TWRI will coordinate with Wildland Hydrology to provide Applied Fluvial Geomorphology Short Course to 40 water professionals in Texas. A registration fee of \$500 will be charged to short course participants.*

The following actions have been completed during this reporting period:

- a. On December 17, TWRI traveled to Bandera to make final arrangements for the *Applied Fluvial Geomorphology (AFG) Short Course*. West Verde Creek, located in the Hill Country State Natural Area, was selected for the field exercises planned for Tuesday, January 29.
- b. The *AFG Short Course* was held on January 28-February 1, 2008 at the Mayan Dude Ranch in Bandera. Forty-four personnel representing the TPWD, TCEQ, TXDOT, TFS, Extension, and TWRI participated in the course.
- c. The *AFG Short Course* was well received. An evaluation form was distributed via email following the course to determine the level of satisfaction on a scale of 1-5 with the course overall, lectures, field tours, administration of the course, likelihood of application of knowledge gained, and interest in attending other short courses put on by Dave Rosgen in the future. To date, 16 of the participants have responded as follows:

1. Overall Short Course Evaluation	4.8
2. Dave Rosgen Lectures	4.6
3. Field Tour	
• Transportation	3.4
• Medina River Gage	4.6
• W. Verde Creek	4.7
• Deer Creek Camp Dam Site	4.6
• FM337 Bridge	4.8
• Garner SP Bank Stabilization	4.8
• Nueces River Bank Erosion	4.4
4. Administration	
• Course Announcement	4.6
• Website	4.4
• Course Materials	4.8
• Registration	4.7
• Facilities	4.6
• Refreshments	4.6
• Meals	4.7
5. Likelihood of Applying Knowledge	4.4
6. Interest in Future Rosgen Courses	4.6

- d. Other Comments on the administration of the short course and the course as a whole are provided in Attachment 2.

**100% Complete**

*Task 3.4: Develop and Administer Questionnaire – TWRI will oversee the development of a questionnaire to gauge the knowledge gained by the course participants. This questionnaire will be administered at the beginning and end of each short course to demonstrate the course's effectiveness and identify areas of the course needing adjustment.*

The following actions have been completed during this reporting period:

- a. No activity.

**0% Complete**

#### **OBJECTIVE 4: SUBMIT FINAL REPORT**

*Task 4.1: Draft Report*

The following actions have been completed during this reporting period:

- a. No activity.

**0% Complete**

*Task 4.2: Final Report*

The following actions have been completed during this reporting period:

- a. No activity.

**0% Complete**

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

- Interest in the *AFG Short Course* was tremendous. A waiting list is being maintained for possible future offerings of the course. Based on the interest in the *AFG Short Course* and the survey responses, it is anticipated that an additional offering of the *AFG Short Course* or Rosgen's Level II Course, *River Morphology and Applications Short Course* would be well received and should be considered as funding allows.

### **IV. Projected Work for Next Quarter**

- Prepare and submit Year 1, Quarter 4 Progress Report
- Obtain presentations from all instructors
- Develop questionnaire
- Prepare materials for each course assignment
- Continue Registration
- Update Webpage as materials are developed
- Send email reminders to invitees to register
- Compile materials
- Confirm all arrangements

Attachment 1

## Texas Watershed Planning Short Course Agenda

**Monday, June 2, 2008**

- 11:00 – 1:00 pm      **Registration (Distribute Knowledge Assessment)**  
A pre-course examination will determine the knowledge level of each participant prior to going through the course. The pre-course exam results will be compared to the post-course exam results to assess course impact/knowledge gained.
- 12:00 – 12:45 pm      **Lunch**
- 1:00 – 1:45 pm      **Introduction..... Wagner**  
This session will provide the group (1) the opportunity to introduce themselves and the watersheds they are working in, (2) information on facilities, (3) an overview of the course, its purpose and structure and (4) a brief discussion of *The Best Watershed-Based Plans in the Nation* and its implications on the training. It will also provide an introduction to the watershed planning process as described in Chapter 2 of EPA's *Handbook for Developing Watershed Plans to Restore and Protect Our Waters (Handbook)* and briefly discuss why plans should be developed, how watershed protection plans (WPPs) interact with other water resources planning processes, and background on watershed plans/planning.
- 1:45 – 2:45 pm      **Nine Elements of a Watershed Protection Plan ..... Lehman**  
Provide an in-depth overview of the Nine Elements to be included in a WPP as outlined in Chapter 2 of the *Handbook*.
- 2:45 – 3:30 pm      **State and Federal Perspectives on WPPs.....Rush/Wendt**  
This session will describe (1) the goals and importance of WPPs, (2) how WPPs fit into state and federal objectives and interact with other state and federal programs, and (3) current issues affecting watershed planning efforts.
- 3:30 – 3:45 pm      **Break**
- 3:45 – 4:45 pm      **EPA Watershed Plan Builder ..... Lehman**  
This session will provide a tutorial on the EPA Watershed Plan Builder.
- 4:45 – 5:00 pm      **Assignment 1: Utilize EPA Watershed Plan Builder**  
The group will be split up into teams to utilize the EPA Watershed Plan Builder to develop a WPP outline for various watersheds in the state.
- 5:00 – 6:15 pm      **Working with Stakeholders to Move the Process Forward .....MacPherson**  
Stakeholders form the backbone of your watershed planning effort. Learn tips on how to get off on the right foot and keep the energy going throughout your watershed planning and implementation program. Topics to be addressed include: determining who needs to be involved, making meetings count, diffusing conflict, making decisions using a consensus-based approach, and sustaining the stakeholder group. This session will focus on Chapter 3 of the *Handbook*.
- 6:45 pm      **Dinner**

## Tuesday, June 3, 2008

- 8:00 – 8:45 am           **Breakfast**
- 8:45 – 9:45 am           **Using Outreach to Develop & Implement WPPs - Element E.....MacPherson**  
Outreach is a powerful tool to get stakeholders involved early in the planning process, promoting behavior change in the watershed, enhancing the implementation of your management strategies in the watershed. Learn tips and tools to conduct effective outreach without breaking the bank. This session will focus on Chapter 12.2 of the *Handbook*.
- 9:45 – 10:15 am       **Partnership Building Experiences in Plum Creek..... Dictson**  
Experiences in Plum Creek watershed with getting local involvement, announcing meetings, setting up the committee and subcommittees, publicizing the effort, what needs to be discussed/decided at each meeting, and timelines will be discussed. Sample invitation letters, ground rules, press releases, and other materials will be provided.
- 10:15 – 10:30 am       **Break**
- 10:30 – 11:30 am       **Communicating to Diverse Audiences to Achieve Your Goals ....MacPherson**  
There is no one-size fits all approach. This session will explore various strategies and techniques to translate technical data into useful information.
- 11:30 – 12:00 pm       **Web-Based Tools for Watershed Assessment & Management ..... Lehman**  
Web-based tools available from EPA to support watershed planning will be reviewed.
- 12:00 – 12:45 pm       **Lunch**
- 1:00 – 1:30 pm           **Defining the Scope of the WPP.....Wendt**  
This session will discuss identifying issues of concern, developing preliminary goals, and selecting indicators of environmental conditions as outlined in Chapter 4 of the *Handbook*.
- 1:30 – 3:00 pm           **Gathering data to assess your watershed..... Wagner/Dictson/Hauck**  
What data do you need? Where do you find the data? How do you get info from TCEQ and other agencies? This session will examine (1) materials from Chapters 5-6 of the *Handbook*; (2) how GIS may be used for watershed analysis, source identification and watershed characterization; and (3) sources of data in Texas and how best to obtain it.
- 3:00 – 3:15 pm           **Break**
- 3:15 – 4:00 pm           **Analyzing Data to Characterize Your Watershed..... Kenimer**  
How do you analyze your data? What tools are available? Is modeling needed? This session will concentrate on materials from Chapters 7 and 8.1-8.2 of the *Handbook* in order to provide the group an understanding of the methods/options available for analyzing watershed data and estimating pollutant loads. Simplistic methods for calculating loads and assessing sources will be presented.



- 4:00 – 4:30 pm      **Expectations for Element A .....Lamb**  
The expectations for Element A will be reviewed and discussed to provide the group an understanding of what is necessary to identify causes and sources of water quality impairments and concerns.
- 4:30 – 5:15 pm      **Turn In and Discuss Assignment 1**  
Each team will discuss their watershed and Plan Builder outline.
- 5:15 – 6:15 pm      **Q & A**  
This session provides participants the opportunity to discuss issues and questions regarding partnership building and watershed characterization with other watershed coordinators, EPA, TCEQ and TSSWCB.
- 6:45 pm              **Dinner**

**Wednesday, June 4, 2008**

- 8:00 – 8:45 am      **Breakfast**
- 8:45 – 9:30 am      **Overview of Models for Estimating Pollutant Loads & Reductions .....Hauck**  
If modeling is needed, what models are available and how do you select a model? This session will present materials from Chapter 8.3-8.5 of the *Handbook* to give the group an overview of the models available, expectations for what each model can deliver (i.e. what you can and cannot get from them), costs, and factors to consider when selecting models (i.e. timelines and data needs for complex watershed models).
- 9:30 – 10:15 am      **Spreadsheet/Time Variable Models ..... Kenimer**  
This session will demonstrate how to use load duration curves (LDC) to determine needed pollutant load reductions and assess potential sources of the pollutants. The use of simple mass balance and spreadsheet models will also be reviewed and demonstrated for use in assessing watershed pollutant loadings, reductions needed, and sources. Chapter 8 of the *Handbook* will be highlighted.
- 10:15 – 10:30 am      **Break**
- 10:30 – 11:15 am      **Assignment 2: Estimating Pollutant Loads For Plum Creek Using LDCs**  
The class will be split into 10 groups for this exercise. Flow and concentration data will be provided to each group to develop LDCs for Plum Creek and assess bacteria and nutrient reductions needed. Results will be discussed and compared to the findings of the Plum Creek WPP.
- 11:15 – 12:00 pm      **Perspectives on Monitoring, Modeling and Decision Making ..... Harmel**  
An overview of monitoring, modeling, and decision making will be provided. Understanding the difficulties of data collection, the uncertainty in collected data, and how to use that data in modeling and decision making will be discussed.
- 12:00 – 12:45 pm      **Lunch**

12:45 – 1:30 pm	<p><b>Setting Goals &amp; Identifying Load Reductions Needed ..... Miranda</b>  This session will discuss refining goals, identifying management objectives, and determining load reductions needed as described in Chapter 9 of the <i>Handbook</i>.</p>
1:30 – 2:00 pm	<p><b>Expectations for Element B ..... Wendt</b>  The expectations for Element B will be reviewed and discussed to provide the group with an understanding of the level of detail and effort needed to determine ‘acceptable’ pollutant loadings, and whether or not load reductions are needed to reach acceptable levels.</p>
2:00 – 2:30 pm	<p><b>Pollutant Fate and Transport Mechanisms ..... Kenimer</b>  Knowing the fate and transport mechanisms of the pollutant(s) being addressed will help decision-makers select the most appropriate BMPs for their watershed. This session will discuss the fate and transport mechanisms for major pollutants encountered in the state and what types of practices are most appropriate for addressing them.</p>
2:30 – 3:00 pm	<p><b>Agricultural NPS Measures and WQMPs ..... Wendt/Wagner</b>  Agricultural NPS measures in Texas are typically implemented through the SWCDs, TSSWCB, and NRCS as part of a Water Quality Management Plan. This session provides an overview of (1) agricultural BMPs and these plans, (2) how to develop a preliminary list of agricultural BMPs to address the issues of concern, (3) finding information on the effectiveness of agricultural BMPs, and (4) estimating BMP implementation costs.</p>
3:00 – 3:15 pm	<p><b>Assignment 3: Select Agricultural NPS BMPs for Plum Creek</b>  Using the NRCS Field Office Technical Guide, the group will quickly select agricultural BMPs for Plum Creek. Selected BMPs will be compared and contrasted with those selected for the Plum Creek WPP.</p>
3:15 – 3:30 pm	<p><b>Break</b></p>
3:30 – 4:15 pm	<p><b>Urban NPS Measures ..... Kenimer</b>  This session will provide an overview of (1) urban NPS measures, (2) how to develop a preliminary list of urban BMPs to address the issues of concern, (3) finding information on the effectiveness of urban BMPs, (4) estimating BMP implementation costs; and (5) stormwater permitting..</p>
4:15 – 4:45 pm	<p><b>Wastewater Treatment Systems ..... Miranda</b>  This session provides an overview of (1) wastewater treatment systems (WWTFs and OSSFs), (2) their effectiveness in removing various pollutants, (3) how to incorporate them into voluntary WPPs, (4) point source permitting issues, and (5) the costs of implementing these measures.</p>
4:45 – 5:30 pm	<p><b>Other Approaches to Managing Pollutant Sources ..... Rast/Thornton</b>  In addition to conventional wastewater treatment, urban measures, and agricultural BMPs, other options exist for achieving water quality protection and improvement. Among these are wetland development, riparian protection, and urban planning and zoning. This session will discuss these and other topics and how to incorporate them into WPPs.</p>

5:30 – 6:15 pm           **Prioritizing and Selecting Management Measures .....****Rast/Thornton**  
This session will discuss evaluating and selecting management practices developing decision criteria, summarizing evaluation results for presentation to stakeholders, obtaining feedback from stakeholders, ranking preferences, and selecting the final management strategy as described in Chapters 10-11 of the *Handbook*.

6:45 pm                   **Dinner**

### **Thursday, June 5, 2008**

8:00 – 8:45 am           **Breakfast**

8:45 – 9:15 am           **Overview and Expectations for Element C .....****Rush**  
This session will provide a discussion of expectations for Element C as well as steps to select management practices as described in Chapter 10 of the *Handbook*.

9:15 – 10:00 am       **Targeting Critical Areas and Scheduling Implementation .....****Davenport**  
To achieve the most effective and immediate benefit, BMP implementation must be targeted to the most critical areas. This session discusses the targeting of control measures and the importance of this effort to the ultimate success of the WPP. This session also discusses scheduling implementation efforts (Chapter 12.3 of the *Handbook*) as described in the final management strategy.

10:00 – 10:15 am       **Break**

10:15 – 11:15 am       **Assignment 4: Evaluate Element C and F of Plum Creek WPP**  
The group will review Elements C and F of the Plum Creek WPP. The group will be split into 8 groups. Two groups will review each of the following sections: (1) the WWTF section (Element C), (2) the agricultural NPS section (Element C), (3) the urban NPS section (Element C), and (4) the schedule for implementation (Element F). Group evaluations will be compared and contrasted.

11:15 – 12:00 pm       **Developing Interim Milestones & Criteria to Measure Progress ....****Davenport**  
This component of the WPP is where the rubber meets the road. It is here that you define in realistic terms how you will determine (1) if you are on track and making progress or not, (2) how/when you evaluate your progress, and (3) what to do if watershed improvements are not on track. This key session will discuss developing interim measurable milestones (Element G) and establishing a set of criteria to measure progress (Element H) toward meeting water quality standards and other goals as presented in Chapter 12.4-12.5 of the *Handbook*.

12:00 – 12:45 pm       **Lunch**

12:45 – 1:45 pm       **Designing & Implementing Effectiveness Monitoring – Element I .....****Hauck**  
This session will provide guidance on developing Element I as described in Chapter 12.6 of the *Handbook*. Selecting an appropriate experimental design that incorporates previous and ongoing monitoring efforts will be discussed.

- 1:45 – 2:15 pm      **Using Volunteer Monitoring For Assessment and Outreach.....Mendelman**  
 This session provides an overview of Texas Watch, a statewide network of volunteers, partners, and institutions that promote a healthy and safe environment through education, data collection, and community action. This session will describe how voluntary efforts such as Texas Watch may be a valuable component to any WPP.
- 2:15 – 2:45 pm      **Texas Watershed Steward Program ..... Dictson**  
 This session provides an overview of the Texas Watershed Steward Program, a science-based, watershed education designed to help citizens identify and take action to address local water quality issues. Incorporation of this program into WPP efforts empowers stakeholders by providing them with the knowledge to make informed decisions about water resources.
- 2:45 – 3:00 pm      **Break**
- 3:00 – 5:15 pm      **Financing Watershed Implementation ..... Jarocki**  
 This session will provide demonstrations of Plan2Fund and Plan2Fund OPT. Plan2Fund is a watershed planning tool that walks users through estimating the costs of their watershed plans goals and objectives, assessing any local match, and determining the funding gap needed to meet the goals and objectives of the plan. The Plan2Fund Objective Prioritization Tool (Plan2Fund OPT) has been designed to help your organization develop and implement a long term financial strategy to meet strategic goals.
- 5:15 – 5:30 pm      **Assignment 5: Use Plan2Fund and Plan2Fund OPT**
- 5:30 – 6:15 pm      **Expectations for Element D .....Rush/Wendt**  
 This session will discuss expectations for Element D which describes the financial and technical assistance needs and identifies the sources/authorities that will be relied on for implementation as described in Chapter 12.7 of the *Handbook* (Element D). Funding sources in Texas will be discussed along with match requirements and the mechanisms for requesting it.
- 6:45 pm              **Dinner**

**Friday, June 6, 2008**

- 8:00 – 8:45 am      **Breakfast**
- 8:45 – 9:15 am      **Discuss Plan2Fund and Plan2Fund OPT Assignment**
- 9:15 – 10:15 am      **Financing Watershed Implementation ..... Jarocki**  
 This session will provide a demonstration of the Directory of Watershed Resources, an on-line, searchable database of financial resources for watershed restoration.
- 10:15 – 10:30 am      **Break**

- 10:30 – 11:45 am      **Putting It All Together – Now What? .....** **Wagner/Wendt**  
This session will discuss assembling a WPP, gaining stakeholder approval, submitting the WPP for state and federal review, developing an evaluation framework and devising a method for tracking progress as described in Chapter 12.8-12.11 of the *Handbook*. Also to be discussed is what to do once the WPP is ready for implementation as described in Chapter 13 of the *Handbook*, including implementation strategies, adaptive management, and what you can do to ensure the long-term sustainability of your WPP. Options such as developing 501(c)(3) organizations will be reviewed.
- 11:45 – 12:00 pm      **Knowledge Assessment/Course Evaluation.....** **Wagner**  
A post-course examination will be distributed and the results compared to the pre-course exam in order to determine course impact and knowledge gained. A course evaluation will also be distributed to gain feedback on how to improve the course.
- 12:00 pm      **Adjourn**  
Certificates will be distributed as the group turn in the course evaluations.

## Attachment 2

### **PARTICIPANT COMMENTS FROM AFG SHORT COURSE**

*January 28 – February 1, 2008*

1. There is a lot of jargon/equations in Dave's lectures, much of which I was unfamiliar with prior to the course. Instead of pre-reading literature on stream measurements, I think students should read and familiarize themselves with the terminology used throughout the week. Other than being a little behind the terminology all week, the course was great and Dave is excellent at what he does. I would like to know what becomes of the sites we visited on Thursday? Especially the one at Garner S.P.
2. I learned more about applying fluvial geomorphology principles in this one week course than I did in a semester long geomorphology graduate course. I look forward to putting these principles into practice and learning more about stream restoration by participating in other Rosgen courses in the future.
3. Thanks for putting this course on. I learned a lot in a very short time. The information will be very valuable in addressing stream impairments associated with physical modifications. I think it is important, however, to recognize that the Rosgen method is not yet universally accepted and that there are notable objections to his methodology in the scientific community. I am not sure how to address this issue in a course like the one held in Bandera, but I think thought should be given on devising a way of incorporating differing opinions on stream restoration methodologies into future courses. Thanks again for a great course.
4. Good mix of instruction and professional networking
5. Field tour transportation was rated as neutral because the charter bus was comfortable and a great idea; however, this particular driver was terrible. We could have easily crashed a couple of times with his lack of driving skills. The class was money well spent! Rosgen gave us our money's work with the long days of activities. Very good information that needs to reach more professionals in the water resources disciplines. Very appreciative of the sponsorship role of TWRI & EPA to reduce the cost for government employees, because I would not have been able to attend at the full rate. Thank you. Very good information gained through the Thursday site assessments; good choice of projects.
6. Excellent location, social entertainment, lodging staff
7. I would have liked some bottled water available, especially with the poor quality tap water at the facility. Granted, there was a water cooler in the corner, but we could only get water one cup at a time (and it looked a little mildewy). The class was very informative. I spent lunchtime on Friday and the car ride home discussing how we could implement some of it at TxDOT. Like we said during class, it will take time but we have ideas on how to approach it. The second book for each agency is much appreciated, even if we have to share. And thanks for the coffee mug!

8. Overall this was one of the best courses I have ever taken. I can see where many agencies can incorporate these principles into their job functions. I also feel that Texas is definitely lacking in the utilization of these concepts using old methods that have been proven over and over that they do not work. I hope to complete all the courses to gain the valuable experience, knowledge and in depth understanding that these courses have to offer in order to be able to fully implement these principles in my job.
9. Great location
10. Because of our location in the state and the high degree of our responsibility devoted to reservoirs it is unlikely that I will be conducting the stream measurements and or restoration first hand. However, the material covered in this course will allow me to communicate and understand what the engineers and hydrologists from the controlling authorities are telling me. Furthermore, it will allow me to make more informed decisions when reviewing permits for engineering projects and bank stabilization projects on reservoirs or streams. I would recommend this course for any water resource manager.
11. This was a very informative class, and I enjoyed meeting and networking with the other participants. I hope we will get Dave Rosgen to come and give the remaining 2 courses in Texas.
12. The staff and the facilities at the Mayan Ranch were top notch and made the duration of the class easy to handle.
13. My only complaint for the entire trip was the bus driver for the final field day. That guy scared the crap out of me and take my word for it, that's not an easy thing to do. In future classes, it would be EXTREMELY helpful to have someone fairly knowledgeable and 'high up' from the Corps of Engineers attend this training to provide insight from the Corps perspective on how government entities (such as the DOT) could approach large scale restoration projects in conjunction with highway and bridge replacement/ rehabilitation projects. Along with this, a Corps representative could provide some guidance on constructing such projects to stockpile or 'bank' mitigation credits for future transportation project impacts.
14. I really liked the course, though it was a bit over my head in light of my particular job (storm water permitting). I will be able to use the info from the class if I deal with others who are more directly involved in restoration projects. I'd love to see a very one-day (or half day) class tacked on to the beginning of the week-long course, for managers/decision-makers who are not technical. I personally would have benefitted from more direction prior to going out in the field. I think that the groups may have functioned better as teams if we had met together before, to discuss who would take on what role. I think that Rosgen is one of those rare individuals who can bring significant change in the way things are done. He obviously loves his work and knows his subject. It was a pleasure to learn from a person who has something truly new to teach.
15. Lodging was below average.

16. The class was very informative and full of much needed information. The format for the course was necessary due to the large amount of information that was presented; however, I believe that breaking up the lecture sessions to work through calculations or to walk out to a site that was nearby would probably have enhanced learning. Nine hour long lecture sessions tend to overwhelm students and they being to lose concentration. The field trips were extremely interesting and certainly showcased the large amount of variation we have within Texas. I would recommend this class to anyone who works with riverine systems.
17. The lectures and corresponding slide shows were very informative and useful; however, the field exercise conducted on Tuesday to collect data at West Verde Creek was frustrating and resulted in an incomplete learning experience for all participants. Due to the structure of the exercise, participants could gain passing familiarity with one aspect of equipment use/sampling procedure, yet remain completely ignorant of the practices used to gain other essential data on the same stream. When working up the data, team members had no idea how data other than their own was collected, and putting these numbers in equations to generate more numbers of questionable quality in an information vacuum did not increase the understanding of the principles of stream measurement. It would have been more useful to me to observe and participate in all aspects of the stream measurement exercise, then work up the data in a teacher-guided environment as a class while being informed on the relative importance and application of each calculation. Furthermore, the group presentations on Wednesday morning was not a good use of time, as that morning could have been more productively used to demonstrate the proper application of accurately-collected field data. The site visits on Thursday were very informative and interesting.
18. I would have liked a little less talk and a lot more action --- more hands-on problem solving in particular.