

---

**Project 1.19      Texas Watershed Planning Short Course (160 Participants)**

**Subgrantee:            Texas Water Resources Institute (TWRI)**

**INTRODUCTION**

***Problem Statement***

According to the Draft 2004 Texas Water Quality Inventory and 303(d) List, 306 water bodies in Texas are listed as impaired with a total of 419 impairments. A well coordinated watershed approach is needed to provide the framework for focusing public and private sector efforts to address the highest priority water quality impairments. Proper training of watershed coordinators and water professionals is needed to ensure that watershed protection efforts are adequately planned, coordinated, and implemented and the results properly assessed and reported.

***Project Description***

To achieve this, 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 review planned and ongoing activities and provide recommendations and guidance.

This team will develop a thought-provoking weeklong course on developing each of the 9 key elements of a watershed protection plan as discussed below:

1. An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in the watershed plan (and to achieve any other watershed goals identified in the watershed plan), as discussed in item (2) immediately below. Sources that need to be controlled will be identified at the significant subcategory level with estimates of the extent to which they are present in the watershed (e.g., X number of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility; Y acres of row crops needing improved nutrient management or sediment control; or Z linear miles of eroded stream bank needing remediation).
2. An estimate of the load reductions expected for the management measures described in item (3) below (recognizing the natural variability and the difficulty in precisely predicting the performance of management measures over time). Estimates will be provided at the same level as in item (1) above (e.g., the total load reduction expected for dairy cattle feedlots; row crops; or eroded stream banks).
3. A description of the NPS management measures that will need to be implemented to achieve load reductions estimated in item (2) above (as well as to achieve other watershed goals identified in the watershed plan), and an identification (using a map or a

description) of the critical areas in which those measures will be needed to implement the plan.

4. An estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon, to implement the plan. As sources of funding, States should consider the use of their Section 319 programs, State Revolving Funds, USDA's Environmental Quality Incentives Program and Conservation Reserve Program, and other relevant Federal, State, local and private funds that may be available to assist in implementing the plan.

5. An information/education component that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented.

6. A schedule for implementing NPS management measures identified in the plan that is reasonably expeditious.

7. A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented.

8. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made towards attaining water quality standards and, if not, the criteria for determining whether the watershed plan needs to be revised or, if a NPS TMDL has been established, whether the NPS TMDL needs to be revised.

9. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established in item (8) immediately above.

The course will combine oral presentations with discussions, exercises, examples, and case studies. Examples from ongoing Texas projects will be used as part of the educational program. Watershed coordinators from the Arroyo Colorado, Pecos, Tarrant Regional Water District, Bosque, Lake Granbury, and Concho watersheds will provide examples of how they developed each section. This will allow the participants to see how others developed their plans as well as provide ongoing watershed planning efforts with valuable input from participants and national experts on the methods being used.

As stated above, experts from around the nation will be brought in to discuss such topics as obtaining stakeholder involvement, "how to" discussions on developing each section of the plan, identifying appropriate BMPs, designing a monitoring program, and finding funding resources for implementing a plan.

Sessions on obtaining stakeholder involvement utilizing such guides as "Getting in Step" will be provided. Stakeholder involvement through such programs as the Texas Watershed Steward Program, Texas Watch Program, Clean Rivers Program, and Texas Naturalist Program will also

be highlighted. In addition, a comparison between TMDLs and watershed protection plans will be provided.

This program will be designed to meet the objectives of the Texas NPS Management Plan, TCEQ TMDL Team Efforts, NRCS Watershed Efforts, TSSWCB and TCEQ Watershed Protection Planning Efforts, and EPA Watershed Planning needs.

Year 1 will be spent planning the program, assembling the materials and curriculum, and making arrangements for the first short course that will be conducted at the beginning of year 2. At the beginning of year 3, roughly 12 months following the first short course, a second course will be provided. A third short course will be offered near the end of year three. Additional short courses may be offered as needed and funding allows. With a class size of 40, this will educate approximately 120 water professionals in Texas and the surrounding region about watershed planning. If successful, this program could also be provided to professionals from other states throughout EPA Region 6.

This collaborative project between EPA, TCEQ, TSSWCB, Texas River Systems Institute, TCE and TWRI will support development of Watershed Protection Plans and promote sustainable proactive approaches to managing water quality at the state level. In achieving this goal, TWRI will (1) assemble a team of key personnel, (2) develop a comprehensive WPP training program, and (3) provide the Texas Watershed Planning Short Course to water professionals throughout Texas and the surrounding region.

In addition to the Texas Watershed Planning Short Course, an Applied Fluvial Geomorphology Short Course will also be provided to further the understanding of Texas water professionals of watershed function and processes.

**CONSISTENCY WITH TEXAS NONPOINT SOURCE POLLUTION MANAGEMENT PROGRAM:** : The project supports the *Texas Nonpoint Source Management Program Long-Term Goal* of protecting and restoring water quality from nonpoint source pollution by providing training to water professionals in Texas, which will provide those individuals with knowledge and tools to 1) Support the implementation of state, regional, and local programs to prevent nonpoint source pollution through assessment, implementation and education; 2) Develop partnerships, relationships, memoranda of agreement, and other instruments to facilitate collective, cooperative approaches to manage NPS pollution.

The project also supports the *Texas Nonpoint Source Management Program Short-Term Goals* of Data Collection and Assessment and Implementation by providing training to water professionals which will provide those individuals with knowledge and tools to 1) Identify surface waterbodies and aquifers that need additional information to characterize non-attainment of designated uses and quality standards; 2) Conduct special studies to determine sources of NPS pollution and gain information to target TMDL activities and BMP implementation; 3) Work with regional and local entities to determine priority areas and develop and implement strategies to address NPS pollution in those areas

**EPA PERFORMANCE ACTIVITY MEASURES:** This project will support EPA's Performance Assessment Measure WQ-27 by adding to the number of watershed-based plans supported under State Nonpoint Source Management Programs since the beginning of FY 2002 that have been substantially implemented.

## **OBJECTIVE 1: PROJECT COORDINATION AND ADMINISTRATION**

**Goal:** To effectively coordinate and monitor all work performed under this project including technical and financial supervision, preparation of status reports, and maintenance of project files and data. A team will be organized to guide the development and delivery of the Texas Watershed Planning Short Course. TWRI will perform accounting functions for project funds and be responsible for developing timely and accurate reports. Progress reports shall document all activities performed within a quarter and shall be submitted no later than thirty (30) days after the close of the quarter.

**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.

**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.

**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 15<sup>th</sup> of the month following each state fiscal quarter for incorporation into the Grant Reporting and Tracking System (GRTS). The Reports are to include:

- Status of deliverables for each objective
- Narrative description in Progress Report format

**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.

**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.

**Task 1.6 Contractor Evaluation** – TWRI will participate in Contractor Evaluation (as scheduled).

**Measures of Success:**

- Adherence to all TCEQ administrative requirements; timely completion and submittal of all progress reports and deliverables.

**Deliverables:**

- Meeting notices, agendas, meeting summaries, meeting materials, and lists of attendees of Team Meetings
- Quarterly Reports
- Reimbursement Forms
- Contractor Evaluations

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

**Goal:** To develop training materials for watershed planning short course program

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

**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.

**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. Web site delivery of information will be the most time and cost effective way to disseminate information to interested people or groups. Information presented through the Web site will include:

- PDF versions of all reports, course materials, and presentations generated.
- Links to all cooperating and/or participating agencies.
  - Texas Commission on Environmental Quality
  - Texas State Soil and Water Conservation Board
  - Texas Water Resource Institute
  - Texas River Systems Institute
  - Environmental Protection Agency-Office of Water, CWA §319
- Schedule of upcoming meetings/programs dealing with this project.

**Measure of Success:**

- Effective dissemination of educational material developed through the project via Web site and short courses

**Deliverables:**

- Quarterly Reports
- Summary of existing programs
- Copies of all training materials
- Watershed Training Webpage

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

**Goal:** To provide watershed education to 160 water professionals in Texas and the surrounding region

**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

**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 registration fee of \$350 will be charged to short course participants. As funding and need allow, additional offerings of the short course will be considered.

**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.

**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.

**Measure of Success:**

- Texas Watershed Planning Short Courses – Three Sessions
- One Applied Fluvial Geomorphology Course
- 160 water professionals provided watershed education

**Deliverables:**

- List of participants completing the short course

- Survey from participants
- Summary of results of questionnaire

**OBJECTIVE 4: SUBMIT FINAL REPORT**

**Goal:** To provide TCEQ and EPA with a comprehensive report on the activities and success of the project conducted by TWRI during the course of this project.

**Task 4.1 Draft Report**

**Task 4.2 Final Report**

**Measure of Success:**

- Acceptance of the report by TCEQ and the EPA.

**Deliverables:**

- Draft Report - by August 1, 2009
- Final Report - by August 31, 2009

**ESTIMATED WORK YEARS**

September 1, 2006 - August 31, 2009

**PROJECT BUDGET**

<b>Personnel/Salary</b>	\$	<b>0</b>
<b>Fringe Benefit</b>	\$	<b>0</b>
<b>Travel</b>	\$	<b>0</b>
<b>Supplies</b>	\$	<b>0</b>
<b>Equipment</b>	\$	<b>0</b>
<b>Contractual</b>	\$	<b>317,755</b>
<b>Construction</b>	\$	<b>0</b>
<b>Other</b>	\$	<b>0</b>
<b>Total Direct Costs</b>	\$	<b>317,755</b>
<b>Indirect Costs</b>	\$	<b>0</b>
<b>Unrecovered IDC</b>	\$	<b>0</b>
<b>Total Costs</b>	\$	<b>317,755</b>

**Federal Match \$ 190,653 + Local/State Match \$ 127,102 = \$ 317,755**