

# Texas Watershed Planning Short Course

Course Agenda – January 12-16, 2009

**Monday, January 12, 2009**

**Facilitator: Kevin Wagner**

- 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.
- 1:00 – 2:00 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 and ground rules, (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.
- 2:00 – 2:30 pm      **Nine Elements of a Watershed Protection Plan ..... Rush**  
Provide an in-depth overview of the Nine Elements to be included in a WPP as outlined in Chapter 2 of the *Handbook*.
- 2:30 – 3:30 pm      **Perspectives on WPPs .....Panel**  
A panel composed of Ken Banks (City of Denton), Bill Carter (TCEQ), Randy Rush (EPA), and Aaron Wendt (TSSWCB) will discuss (1) the goals and importance of WPPs, (2) how WPPs fit into local, state and federal objectives and interact with other local, state and federal programs, and (3) current issues affecting watershed planning efforts.
- 3:30 – 3:50 pm      **Break**
- 3:50 – 5:15 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*.
- 5:15 – 6:00 pm      **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.

6:45 pm	<b>Dinner</b>
8:00 – 9:00 pm (optional)	<b>Q &amp; A</b> This session provides participants the opportunity to discuss issues and questions regarding partnership building, the nine key elements, and WPP perspectives with other watershed coordinators, EPA, TCEQ and TSSWCB.

**Tuesday, January 13, 2009**

**Facilitator: Nikki Dictson**

8:00 – 8:45 am	<b>Breakfast</b>
8:45 – 9:45 am	<b>Using Outreach to Develop &amp; Implement WPPs - Element E.....MacPherson</b> Outreach is a powerful tool to get stakeholders involved early in the planning process, promoting behavior change in the watershed, and 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 <i>Handbook</i> .
9:45 – 10:30 am	<b>Defining the Scope of the WPP .....</b> 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 <i>Handbook</i> .
10:30 – 10:50 am	<b>Break</b>
10:50 – 12:00 pm	<b>Gathering data to assess your watershed.....</b> Dictson/Wagner 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 <i>Handbook</i> ; (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.
12:00 – 1:00 pm	<b>Lunch</b>
1:00 – 2:10 pm	<b>Analyzing Data to Characterize Your Watershed .....</b> T. Davenport 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 <i>Handbook</i> 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. The session will also examine refining goals, identifying management objectives, and determining load reductions needed as described in Chapter 9 of the <i>Handbook</i> .
2:10 – 3:10 pm	<b>Communicating to Diverse Audiences to Achieve Your Goals ....</b> MacPherson There is no one-size fits all approach. This session will explore various strategies and techniques to translate technical data into useful information.
3:10 – 3:30 pm	<b>Break</b>

- 3:30 – 4:30 pm      **Web-Based Tools for Watershed Assessment & Management ..... McDonnell**  
 Web-based tools available from EPA to support watershed planning will be reviewed.
- 4:30 – 5:15 pm      **Revising the Texas Water Quality Standards ..... L. Hamilton**  
 What can watershed groups do if they think, after completing data analysis for Element A, that the water quality standards are not appropriate and it might be advisable to do a Use Attainability Analysis? This session will outline the steps that must take place as well as the status of current triennial standards review, especially as related to standard for contact recreation/bacteria.
- 5:15 – 6:00 pm      **Expectations for Element A ..... Lamb**  
 The expectations for and an example of 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.
- 6:45 pm              **Dinner**
- 8:00 – 9:00 pm  
 (optional)            **Q & A**  
 This session provides participants the opportunity to discuss issues and questions regarding Element A and watershed characterization with other watershed coordinators, EPA, TCEQ and TSSWCB.

**Wednesday, January 14, 2009**

**Facilitator: Eric Mendelman**

- 8:00 – 8:45 am      **Breakfast**
- 8:45 – 10:00 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).
- 10:00 – 10:20 am    **Break**
- 10:20 – 10:40 am    **Simple Tools for Estimating Loads and Load Reductions ..... 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.
- 10:40 – 11:00 am    **Assignment 1: Perform LDC to Estimate Bacteria Loads/Reductions**  
 Flow and bacteria concentration data will be provided to develop an LDC and assess bacteria reductions needed.
- 11:00 – 12:00 pm    **Perspectives on Monitoring, Modeling and Decision Making ..... Harmel**  
 An overview of the difficulties of data collection, the uncertainty in collected data, and how to use data in modeling and decision making will be discussed.

12:00 – 1:00 pm	<b>Lunch</b>
1:00 – 1:30 pm	<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.
1:30 – 2:00 pm	<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.
2:00 – 3:10 pm	<b>Urban NPS Measures ..... T. Davenport</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.
3:10 – 3:30 pm	<b>Break</b>
3:30 – 4:20 pm	<b>Agricultural NPS Measures .... Wagner</b> Agricultural NPS measures in Texas are typically implemented through the SWCDs, TSSWCB, and NRCS as part of a Water Quality Management Plan or Resource Management System. 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.
4:20 – 4:40 pm	<b>Assignment 2: Select Agricultural NPS BMPs</b> Using the NRCS Field Office Technical Guide, the class will quickly select BMPs to address a variety of water resource issues and sources.
4:40 – 6:00 pm	<b>Wastewater Treatment Systems ..... Lesikar</b> This session provides an overview of (1) wastewater treatment systems (WWTFs and OSSFs), (2) their effectiveness in removing pollutants, and (3) the costs of implementing and upgrading/improving these systems.
6:45 pm	<b>Dinner</b>
8:00 – 9:00 pm (optional)	<b>Q &amp; A</b> This session provides participants the opportunity to discuss issues and questions regarding BMPs and Element B with other watershed coordinators, EPA, TCEQ and TSSWCB.

**Thursday, January 15, 2009**

**Facilitator: Nikki Dictson**

- 8:00 – 8:45 am           **Breakfast**
- 8:45 – 9:45 am           **Other Approaches to Managing Pollutant Sources ..... Thornton**  
In addition to conventional treatment methods, 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 approaches and how to incorporate them into WPPs.
- 9:45 – 10:30 am       **Cedar Creek Reservoir Case Study ..... Wolfe**  
This session will discuss evaluating and selecting management practices for Cedar Creek Reservoir. Session will also discuss developing decision criteria and summarizing evaluation results for presentation to stakeholders, obtaining feedback from stakeholders, ranking preferences, and selecting the final management strategy.
- 10:30 – 10:50 am       **Break**
- 10:50 – 11:45 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*.
- 11:45 – 12:00 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.
- 12:00 – 1:00 pm       **Lunch**
- 1:00 – 2:00 pm           **Targeting Critical Areas and Scheduling Implementation ..... T. 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 (Element F) as described in the final management strategy (Chapter 12.3 of the *Handbook*).
- 2:00 – 2:45 pm           **Developing Interim Milestones & Criteria to Measure Progress T. Davenport**  
This component of the WPP is where 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 session will discuss developing interim measurable milestones (Element G) and establishing a set of criteria to measure progress (Element H) toward meeting water quality goals as presented in Chapter 12.4-12.5 of the *Handbook*.
- 2:45 – 3:05 pm           **Break**

- 3:05 – 4:05 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.
- 4:05 – 4:20 pm      **Using Volunteer Monitoring For Assessment and Outreach..... Pinchback**  
 This session provides an overview of Texas Stream Team (formerly 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 Stream Team may be a valuable component to any WPP.
- 4:20 – 4:50 pm      **Expectations for Element D ..... Rush**  
 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.
- 4:50 – 5:35 pm      **Cost – Benefit Analysis in Hickory Creek .....Banks**  
 This session will discuss the cost-benefit analysis completed for Hickory Creek. This detailed financial analysis of implementation strategies is, by many accounts, considered one of the best completed in Texas and will provide a great example for watershed coordinators to utilize to achieve the expectations for Element D.
- 5:35 – 6:00 pm      **Connecting with the Community..... Thornton**  
 This session will focus on creating community level commitment. Building on the stakeholder and partnership processes, identified during the Monday afternoon sessions, as well as the volunteer monitoring and outreach programs, identified during the Thursday afternoon sessions, this session provides tips on creative ways to actively engage the community in watershed management. Media opportunities, like "send your legislator down the river," and "friends of the river" programs, will form a focus of this session.
- 6:45 pm              **Dinner**
- 8:00 – 9:00 pm  
 (optional)            **Q & A**  
 This session provides participants the opportunity to discuss issues and questions regarding selecting BMPs, assembling the remaining elements of WPPs, and determining implementation costs with other watershed coordinators, EPA, TCEQ and TSSWCB.

**Friday, January 16, 2009**

**Facilitator: Kevin Wagner**

- 8:00 – 8:45 am      **Breakfast**
- 8:45 – 10:30 am    **Financing Watershed Implementation ..... Jarocki**  
 This session will provide an overview of Plan2Fund, Plan2Fund OPT, and the Directory of Watershed Resources developed by the Environmental Finance Center (EFC) Network for helping implement watershed plans.

10:30 – 10:50 am	<b>Break</b>
10:50 – 11:15 am	<p><b>Putting It All Together ..... Dictson</b>  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 <i>Handbook</i>.</p>
11:15 – 12:00 pm	<p><b>Implementing your WPP..... Thornton</b>  This session will discuss what to do once the WPP is ready for implementation as described in Chapter 13 of the <i>Handbook</i>, 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.</p>
12:00 – 12:30 pm	<p><b>Knowledge Assessment/Course Evaluation</b>  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.</p>
12:30 pm	<p><b>Adjourn; Lunch</b>  Certificates will be distributed as the class turns in their post-course exam and course evaluations.</p>