

8. Education and Outreach Strategy

The purpose of the Education and Outreach Plan (See Technical Reference Document E) is to define the Cypress Creek community's education and outreach goals and objectives for the Watershed Protection Plan. The initial driving force for the plan's development was the desire by local citizens and Cypress Creek Stakeholder Committee to keep Cypress Creek *clean, clear, and flowing*. The information, education, and public participation initiatives to be implemented are submitted to satisfy Element E of the EPA 9-element criteria for watershed-based plans. Near term efforts are outlined below and longer term strategies are listed in the Education and Outreach Plan (Technical Reference Document E).

During 2009-2010, the Cypress Creek Education and Outreach Subcommittee brought forth ideas through public meetings, as well as the suggestions made by other Subcommittees regarding public awareness, social marketing, and community education. They were specifically tasked with:

- Consideration of other stakeholders and individuals that should be part of the subcommittee and to recruit members of the community;
- Identifying causes of water quality/quantity problems from an education and outreach perspective;
- Identifying existing outreach and education activities and how they can be improved;
- Providing information about the Watershed Committee activities to the local media; and
- Developing an Education and Outreach Plan to meet the goals of the Cypress Creek Project.

In 2012, the draft plan was reviewed by the Cypress Creek Stakeholder Committee and was further refined to specifically address identified challenges in engaging the community. In 2013, the Cypress Creek Stakeholder Committee adopted the Education and Outreach Plan.

The goals of the Education and Outreach Plan are:

1. Increase public awareness
2. Increase community engagement
3. Educate and support decision makers

The Education and Outreach Plan has four main target audiences:

1. Community at large
2. Homeowners/landowners
3. Business owners
4. Government/Education

Implementation of the Education and Outreach Plan includes new media (website, newsletters, signs, bumper-stickers, brochure, etc.) designed specifically to incorporate the



themes described above. Educational activities and BMPs have been tailored and targeted toward areas identified as most in need (Table 22).

Table 22. Education and Outreach Implementation Plan

Education and Outreach Topic	Responsible Party	Estimated Cost	Number Implemented in Years 1-3	Total Value
Events				
Stakeholder Meetings	Stakeholder Committee	\$500	3	\$1500
Contests	Stakeholder Committee	\$500	2	\$1000
DSS Trainings	Stakeholder Committee	\$500	3	\$1500
Stewardship Workshop	Stakeholder Committee	\$500	2	\$1000
Industry Workshop	Stakeholder Committee	\$500	5	\$2500
WPP Workshop	Stakeholder Committee	\$100	3	\$300
World Water Day Celebration	Stakeholder Committee	\$500	3	\$1500
Booth & Outreach Dissemination	Stakeholder Committee	\$500	3	\$1500
Youth Events	Hays County	\$0	6	\$0
Texas Well Owner Network	Texas Water Resource Institute	\$0	3	\$0
Print Materials and Website				
Website	Stakeholder Committee	\$125/yr	3	\$250
Brochure	Stakeholder Committee	\$500	3	\$1500
Stickers and decals	Stakeholder Committee	\$0	3	\$0
Print Material Mass Mailing to Watershed Addresses	Stakeholder Committee	\$1000	2	\$2000
Newsletter	Stakeholder Committee	\$500	6	\$3000

Education and Outreach Topic	Responsible Party	Estimated Cost	Number Implemented in Years 1-3	Total Value
PSAs	Stakeholder Committee	\$500	3	\$1500
Physical Outreach Tools				
Road Signs	Hays County	\$200/sign	6	\$1200
Shower Timers (giveaway 100/yr @ \$3 ea.)	Stakeholder Committee	\$300/yr	2	\$900
CFS Display	Stakeholder Committee	\$500	1	\$500
Watershed Model	Texas Stream Team	\$225	3	\$775
Kiosk	Stakeholder Committee	\$0	1	\$0
Bumper Stickers and Decals (150 to disseminate/yr)	Stakeholder Committee	\$0	3	\$0

Components

Events

Half day weekend workshops and events will be held at the Wimberley Community Center or other convenient location. Press Releases, newspaper notices and direct mailings will be used to attract interested individuals to the workshops. A database for additional direct mail and web-based invitations can be established and maintained by the WPP Partnership. Events will be funded through a variety of sources including Texas A&M University workshops, non-profit/NGO entities such as CARD and the Lion’s Club and anticipated implementation funds from City and County resources as well as grants.

Stakeholder Meetings

The CCP Stakeholder Committee will continue to meet at least quarterly during implementation. Meetings will be announced via email and through the project website. Print announcements will be utilized and are dependent on funding. These meetings will be open to the public and will be an opportunity for collaboration with other NGOs (such as Citizens Alliance for Responsible Development and WVWA). Other meeting agenda items may include WPP progress, how to use the WPP, groundwater protection strategy monitoring results, DSS results and adaptive management. Meetings will be funded by non-profit/NGO entities and anticipated implementation funds from City and County resources as well as grants.

Contests

Develop a program similar to the “Yard of the Month” club, whereby qualifying urban land and home owners would receive recognition (and even ceremonial awards) for their efforts and commitment. This program shall be associated with BMP workshop content and additionally delivered through HOA/POA efforts. Contests will be funded by non-profit/NGO entities and anticipated implementation funds from City and County resources as well as grants.

Community photography contest featuring a call for images to be used in future publications (i.e. Wimberley Institute of Cultures, Wimberley Valley Art League, etc.) in order to generate support and maintain watershed awareness.

DSS Trainings

The DSS was developed based on input from a subcommittee of the Stakeholder Committee members recruited through the Cypress Creek Watershed Protection Planning process. The DSS needs updates to enhance the results from 2009 to incorporate current 2013-2014 land use patterns and the future. One comprehensive training session per year shall be held to give community members the opportunity to utilize this tool. Annual presentations to general audiences showing the future of Cypress Creek and impacts on water quality through the DSS shall illustrate results from the DSS as well as different impacts to the watershed through time and scenarios. Trainings will be funded by non-profit/NGO entities, Texas State University and University of Texas in-kind contributions, and anticipated implementation funds from City and County resources as well as grants.

Stewardship Workshops

Workshops will be funded through a variety of sources including Texas A&M University, non-profit/NGO entities, and anticipated implementation funds from City and County resources, as well as grants.

Groundwater Protection Strategy Workshop

Groundwater protection requires attention above and beyond surface water related activities. Strategic education and outreach shall be created to foster sustainable groundwater resources and awareness throughout the watershed. A series of presentations and workshops will be held to increase awareness about the relationship between surface water quality and groundwater. Audience includes agriculture irrigators, water supply providers, elected officials and community members. A factsheet will summarize the concepts for audiences including agriculture irrigators, water supply corporations, elected officials and community members.

Water Quality Protection for the Homeowner



Regional experts regularly present nonpoint source pollution information at HOA/POA, local gardening club, and Hays County Master Gardeners/ Master Naturalists meetings. Topics will include BMP design, and implementation strategies.

Industry Workshops

Workshops will be funded through a variety of sources including Texas A&M University, non-profit/NGO entities, water providers, and anticipated implementation funds from City and County resources, as well as grants.

Water Providers

A series of workshops will be held to educate water supply providers about the Watershed Protection Plan, highlighting their role in protecting water quality and water conservation efforts and demonstrate tools for high efficiency. These workshops will also establish industry partnerships with the Cypress Creek Project and will include discussions about funding and implementation activities.

Low Impact Development Workshops

The Stakeholder Committee identified educating developers and decision makers about the benefits of Low Impact Development (LID) as a good way to ensure the CCP-WPP LID strategies are implemented as urbanization increases in the watershed.

Rural Landowners, Agriculturalists, & Ranchers: Annual land owner workshops co-hosted by Master Naturalists, AgriLife Extension, Farm Bureau, Natural Resource Conservation Service, The Nature Conservancy and other WPP Partners shall incorporate topical WPP themes geared toward single-family as well as medium to large-sized land owners.

Business Community & Civic Organizations: Strategic partnerships in terms of education and outreach shall be created to foster an economically sustainable support system that generates business awareness throughout the watershed. Supporting participants shall be recognized publicly as a Supporting Partner of the WPP Partnership. Business interests should include locally owned businesses, real estate developers, home builders associations, banks and title companies.

Influential Decision Makers: Presentations designed for elected officials such as county judges and commissioners, city mayors and council members, state legislators and/or congressional representatives shall be held to keep influential decisions makers informed. They will be educated about groundwater issues, opportunities in low impact development, the results of the DSS, and water conservation.

WPP Workshops

Workshops will be funded through a variety of sources including non-profit/NGO entities, and anticipated implementation funds from City and County resources, as well as grants.

CCP Watershed Protection Plan Presentation

Because so many people in the watershed are already involved with some aspect of protecting Cypress Creek there are a number of existing events held. The Stakeholder Committee will work with local meeting holders to have 20-30 minutes set aside on their agendas for an overview of the Cypress Creek Project. Having a prepared presentation to send the hosting organization will allow the Stakeholder Committee to reach a larger audience of concerned landowners. Presentations will be available to anyone seeking more information about the CCP-WPP via the project website.

World Water Day Celebration

Watershed entities will participate in Watershed Awareness Day and the Stakeholder Committee will approach the City Council regarding an official declaration.

Booth & Outreach Dissemination

The CCP maintained its presence in the watershed community by participating in events that reach target audiences. Previously, EcoFest, Jacob's Well Fall Festival, the Cypress Creek Blessing, Stakeholder meetings, and an awareness survey have been used as platforms for disseminating information, recruiting interest in the project, and generating community involvement. A booth at an event is an opportunity to pass out bumper stickers, decals, and brochures as well as talk with interested community members and potentially build partnerships.

Youth Events

The CCP worked with the Wimberley Valley Watershed Association (WVWA) to host elementary school students at Jacob's Well in order to teach them about the importance of this local resource. Popular weekly tours each Saturday at 10AM are currently lead by local docents and provide information about the spring, its caves, local flora and history. This education program for local schools is geared specifically toward youth groups.

Class projects on watershed issues in Cypress Creek can be explored through web- and media-based outreach assignments for middle and high school ages (i.e., blogs and video news). Wimberley Outdoor Educators, WIC, Texas Stream Team and GBRA have materials that can be applied to the curriculum.

Print Materials and Website

The Stakeholder Committee approved the brand for the Cypress Creek bumper sticker and window decal (see Technical Reference Document). The brand has been used on marketing materials, reports, and the project website. The take-away message is to keep Cypress Creek *Clean, Clear and Flowing*. On July 20, 2010, 1000 window decals and 2000 bumper stickers were printed. Many have already been disseminated, leaving approximately half for future CCP Education and Outreach activities. Print materials and website will be funded through a variety of sources including non-profit/NGO entities, and anticipated implementation funds from City and County resources, as well as grants.

Dissemination via:

Website

The project website, cypresscreekproject.org is funded through 2015 by the Meadows Center for Water and the Environment. The site will be linked from the TCEQ watershed webpage. The site currently serves as the clearinghouse for all projects related materials and news updates. The site will be reorganized to be a portal for the Stakeholder Committee to post meeting dates, agendas, education material, surveys, monitoring data and updates to the CCP-WPP. The site houses photos, maps, reports, project updates, meeting notifications and minutes, newsletters new and old, as well as a sign-up sheet for receiving newsletters. Information also includes charts showing patterns of dry and wet and the correlation between pumping and Jacob's Well discharge. The Watershed Characterization Report, housed on the CCP website was completed in late 2010 is an in-depth analysis of the Cypress Creek Watershed. The report describes the location of the watershed, the topography, geology, soils, vegetation, land uses, history, sources of pollution, and more. It is available online at the Cypress Creek website in the Data section as a downloadable PDF.

Brochure

The Cypress Creek Brochure (located in the Technical Reference Document) contains information on how individuals can help protect Cypress Creek and summarizes NPS pollution, urbanization and bacterial pollution in the watershed. The final page discusses the Cypress Creek Decision Support System and the development scenarios modeled to see how pollution in that watershed changes with increased urbanization. The brochure is an ideal document to share with community members, decision makers, developers, project partners to provide background information. An electronic version of the document is available for distribution. A youth version of the brochure is available for local schools. The project team developed the Cypress Creek brochure/pamphlet as a shorter version of the Watershed Characterization Report. This brochure will be available at events and will be directly mailed to the addresses in the watershed. Content of the brochure addresses home-based, rural, urban, and septic issues as well as education points illustrating NPS, Population and Land Use Change, Groundwater Pumping, and Bacterial issues. Information about the CCP-DSS is also included.

Water Conservation

Print Materials developed by Texas Water Development Board describing the benefits of water conservation will be available to the public at: Stakeholder Committee meetings, project website, public buildings, Jacobs Well Natural Area and public meetings and events where the CCP-WPP is represented. This material will also be offered to water supply companies in the watershed to be distributed via mail to their customers.



Newsletter

The *Cypress Flows* Newsletter: *Cypress Flows* was sent via email quarterly to regional stakeholders. These e-newsletters contained information about the project, biographies of local citizens and leaders, and scientific information about the watershed.

PSAs

Public Service Announcements to be implemented through different avenues. Examples include newspaper, web-based, and radio spots showing weekly water conservation tips.

Physical Outreach Tools

These are physical outreach tools identified as highest priority to be implemented in the first 3 years. Stakeholders feel that these measures are the easiest to implement and have the greatest potential to protect the watershed and indirectly reduce potential non-point source pollution impacts. Additional physical outreach tools can be found in Technical Reference Document E – Education and Outreach Plan Overview. Cost information for the tools listed is shown above in Table 22 and potential funding sources are included in the descriptions below.

Road Signs

Six road signs will be placed on county roads throughout the watershed. Each sign says “Inside Cypress Creek Watershed Environmentally Sensitive Area.” The Stakeholder Committee worked with Hays County to identify high traffic roads and feasible places to put the signs. The signs were printed using project funds. Sites include Jacob’s Well Road near the Veterans of Foreign Wars (VFW) Building, Winters Mill Parkway, and Mt. Sharp Road. The remainder will be posted on private or county roads. Existing road signs will be installed and paid for by the Hays County Road Crew/Transportation Division.

Shower Timers

Shower timers are a valuable water conservation tool, and shall be given away during events along with printed materials about the watershed and water conservation. Print materials are valuable for transmitting factual information, but community members can turn those facts into action using a shower timer. Tools like these familiarize laypeople with the application of water conservation and watershed stewardship while creating habits. The Cities of Wimberley and Woodcreek will partner with local and regional non-profit entities to cover the cost and distribution of shower timers.

CFS Display

Community displays to increase awareness shall be installed in high traffic areas. A Cypress Flow Message Display to be displayed in public showing present levels of discharge represents a daily reminder of current conditions, exposing citizens and

visitors to the issues and encouraging public conversation. Project partners will collaborate with local and regional non-profit entities to cover the cost and installation of a CFS display. Additional messaging is expected to be installed using implementation funds if awarded.

Watershed Model

Texas Stream Team provides a traveling watershed model to teach about water quality and water pollution to youth groups. In this hands-on presentation, everybody gets to participate. The presentation demonstrates three things: (1) What is a watershed? (2) What is nonpoint source pollution? and (3) What are some things that you can do to prevent nonpoint source pollution? Students enjoy this hand on approach and leave with an understanding of watershed science and their role in non-point source pollution. This model will be demonstrated at community events and at schools throughout the year. The watershed model and related activities are provided by the Meadows Center for Water and the Environment and their network of trained volunteers.

Kiosk

The project team created an interactive informational kiosk which is available at the Wimberley Community Center. Information at the kiosk displays the issues in the watershed and shows real-time surface water monitoring data, the CCP website, and includes interactive and instructional videos with a touchscreen.

Evaluating Effectiveness of Education & Outreach Component

In order to evaluate the effectiveness of education practices' on water quality improvements, a system will be utilized and results will be documented throughout the implementation phase. The Social Indicator Planning & Evaluation System (SIPES) uses social indicators to help plan, implement and evaluate Nonpoint Source (NPS) management projects. The seven steps (below) begin with a review of project plans and then guide projects through a process to collect, analyze and use social indicators data at the beginning and end of an NPS project (Grenskow and Prokopy, 2011).

1. Review project plan
2. Collect and enter pre-project survey data
3. Review data and refine social outcomes
4. Monitor social data throughout project
5. Collect and enter additional post project data
6. Collect and enter post-project survey data
7. Review data and use results