



Double Bayou Watershed Partnership Newsletter



Photo Credit: Stephanie Glenn

About the Newsletter

The Double Bayou Watershed Partnership was formed in 2013 to create a working plan to improve and protect the water quality of the east and west forks of Double Bayou. The project is coordinated by the Houston Advanced Research Center, the Texas State Soil and Water Conservation

Board, the U.S. Geological Survey, and Shead Conservation Solutions.

This newsletter will keep stakeholders up to date on the project goals and milestones, as well as providing information on events and news regarding the watershed.

Name Your Newsletter!

Our newsletter needs a name, and we would love to have your input! Please send your suggestions for the Double Bayou newsletter name to: brandie.minchew@gmail.com.

Feral Hog Workshop Coming June 27

Today, about 2.6 million feral hogs make their home in Texas, where most of the land offers a viable habitat for them. Feral hogs descend from both wild boar and domesticated swine, which were introduced into Texas in the 16th century. In the 21st century, they pose a threat to native wildlife as an invasive species competing for resources.

Feral hogs can negatively impact a watershed area in a number of ways. They can increase water pollution and bacteria content where they wallow. Their rooting and foraging habits damage vegetation and soil, and they can also damage crops and grazing areas. Feral hogs have the potential to carry and spread diseases, including brucellosis, pseudorabies, and a number of parasitic infections. With a growing population throughout Texas, the destructive nature of feral hogs to natural habitats, rural land and water

quality is a matter of concern for the Double Bayou watershed.

The Double Bayou WPP will offer a workshop that addresses the issue of feral hogs, with suggestions on control and management techniques that can be used to protect the watershed. The workshop is scheduled for Friday, June 27, at the White Park Community Building from 8:30 a.m. to 3:45 p.m. Participants will have the opportunity to earn CEU credits.



Photo credit: Don McCullough

What's a WPP project?

For readers new to the Double Bayou WPP project, "WPP" stands for Watershed Protection Plan. The Double Bayou WPP project will result in a stakeholder-driven, written plan to achieve stream water quality standards through voluntary actions: the Double Bayou Watershed Protection Plan.

Why a WPP project for Double Bayou?

Double Bayou is one of several ongoing WPP projects that are designed to voluntarily address stream water quality in a tributary of Galveston Bay, an estuary of national significance. Like most Galveston Bay tributaries, Double Bayou is listed on the State Impaired Waters List – also known as the "303(d) List" – for having bacteria levels that are unsafe for human contact in some recreational uses. Many also have too little oxygen to support healthy aquatic life.

The good news is that the impairments in Double Bayou are not as severe as for most other Galveston Bay tributaries. It may be possible, with voluntary stakeholder involvement, to improve the stream water quality enough for it to be removed from the State Impaired Waters List without drastic measures. See page 4 for a quick review of the Double Bayou WPP project so far.

Stakeholders Identify Potential Watershed Issues



Photo Credit: Linda Shead

With assistance from the project team, stakeholders have been discussing the stream water quality impairments of Double Bayou and other watershed concerns. They are meeting in workgroups related to the issues: Wastewater/Septic Systems, Recreation/ Hunting/Feral Hogs, and Agriculture/Wildlife/Feral Hogs. In addition, individuals are also being interviewed for their ideas on

residential issues for the watershed.

The groups have identified potential sources and potential management measures for the bacteria and dissolved oxygen water quality problems, along with issues such as invasive species, litter, collections of vegetation, and erosion.

A separate task force has been helping the project team evaluate computerized data about land cover and about the watershed boundary – that is, the dividing line between where water run-off or wastewater eventually ends up in Double Bayou, or instead into another stream or directly into Trinity Bay.

Water Quality Data Collection

HARC's scientist team, working with USGS scientists, have developed Quality Assurance Project Plans for sampling and for modeling, both of which were approved by the EPA. Those plans documented strict protocols to help ensure that the water quality procedures for Double Bayou are accurate, and that the data are used appropriately in analysis.

Stream water quality monitoring for the project is conducted by the USGS. Sampling began in October of 2013

and will continue throughout the project. Analysis will include the sampling data, as well as other quality assured historical data sets.



Photo credit: Sam Rendon

Next Steps

Once stakeholders agree on the description of land uses in the watershed, the potential bacteria sources, and the general locations of those sources, HARC will run computer models to estimate the amount of bacteria loads for the different types of sources. These results will be used in stakeholder discussions concerning which

of the suggested management measures might be most effective in different locations. Stakeholder meetings will continue throughout the Double Bayou WPP project, to provide input and review results.

The project team will also continue to bring more workshop resources to the community.

Project Acronyms

DBWP = Double Bayou Watershed Partnership

DO = Dissolved Oxygen

USEPA = United States Environmental Protection Agency

HARC = Houston Advanced Research Center

TCEQ = Texas Commission on Environmental Quality

TMDL = Total Maximum Daily Load

TSSWCB = Texas State Soil and Water Conservation Board

USGS = United States Geological Survey

WPP = Watershed Protection Plan

If you are out and about in the watershed, you might see a truck pulled over on a bridge over Double Bayou, one with a USGS logo on the side.



Photo Credit: Kristi Alexander

A Local Perspective: Q&A with Becky Fancher

Periodically, the Double Bayou WPP project team will ask local participants to share their thoughts about the project and its activities. This edition features Becky Fancher's responses. Ms. Fancher's interests represent many of the traditional and valued relationships between people and the land and water in the watershed.

What watershed interest do you represent?

Landowner, resident, farmer, rancher, hunter, recreationist

Why did you choose to participate in the Double Bayou WPP project?

The East Fork of the Double Bayou runs through our farming/ranching property, so when we learned of the impending studies and watershed project, we felt we needed to be involved, since it would affect us directly. We felt that local shareholders needed to be more involved since they have the most to gain/lose, even though outside interests are also considered. Also, we have historical and agricultural knowledge of the watershed to contribute to the overall plan and resulting recommendations.

How do you think this project will help your community?

It will keep TCEQ/EPA off our backs, for one thing (i.e., the "impaired" label given to the East Fork), although I'm sure that is not at all a politically correct statement! But on a more serious note, it makes us all aware of water quality problems, which in turn, makes us more cognizant of what we can do to prevent them, and steps that we can take to mitigate the damage done already. One perhaps unintended benefit is that many different entities on the local and state level are meeting each other and that networking is sure to be beneficial

in other areas besides this watershed project.

What would you most like to see come out of this project?

I would like practical, logical recommendations that will not adversely affect our water quality OR our farming/ranching interests. I believe that EVERYONE is on board to get help with the feral hog problem, so that would be another major example. If we also got some funding to help with issues related to the project, that would be welcomed, although matching funds might not be readily available.

Please share with us something you have learned through your participation in this project about the Double Bayou Watershed and water quality.

First, staying involved is critical, unless you want someone else deciding what is in your best interest. Next, I learned more about factors affecting water quality, and how the different government, educational, public, and private entities are involved in determining uses, impairments, and possible sanctions that can be taken when certain criteria are not met. Personally, we hope that our children will be able to enjoy the bayou as much as we do, so we are trying to do our part in keeping the watershed as protected as it can practically be.



Photo Credit: Kristi Alexander

Other Watershed Projects:

According to the TSSWCB website, "...197 waterbodies [in Texas] are impaired because they do not meet surface water quality standards for bacteria, established to protect contact recreation use." Our region is no exception, and below are listed some area watersheds that have a project underway to address this issue:

- Bacteria Implementation Group (covers 60 bacteria-impaired segments of Armand Bayou, Brays Bayou, Buffalo Bayou, Clear Creek, Greens Bayou, Halls Bayou, Sims Bayou, Lake Houston tributaries, and others)
- Bastrop Bayou
- Cedar Bayou
- Dickinson Bayou
- Double Bayou
- Highland Bayou
- San Bernard River
- Upper Oyster Creek
- Upper Gulf Coast Oyster Waters

Watch for more information about some of these projects in upcoming editions of the Double Bayou newsletter.



Photo Credit: Linda Shead

Stakeholder Meeting on June 17

The next stakeholder meeting of the Double Bayou Watershed Partnership will be on Tuesday, June 17, at the Double Bayou Community Building. Sign-in and refreshments (sponsored by Samson Energy) will begin at 5:00 p.m., and the meeting is scheduled from 5:30 to 7:30 p.m. All meetings are open to anyone interested in learning about and doing more to improve and protect stream water quality in the Double Bayou watershed.

The first part of the meeting will be a presentation on resources that TCEQ can provide for local governments, to help with their wastewater systems, as well as programs for small businesses.

The second major topic of this meeting will be a focus on reviewing workgroup input and recommendations on where potential bacteria sources may occur in the watershed.

We hope to see you there!

Highlights of the Double Bayou WPP Project

Who Is the Double Bayou Watershed Partnership?

The Houston Advanced Research Center (HARC) assembled a team (see sidebar for all project partners) to support development of a Double Bayou WPP, one that would assist the watershed community in voluntarily addressing the Bayou's water quality impairments. Since the Double Bayou WPP project is a stakeholder-driven process, the next step was to invite stakeholders to be involved in guiding the plan. Stakeholders include representatives from residents, landowners, farmers, ranchers, businesses, recreationists, and local/state/federal government entities.

Meetings

The kick-off meeting of stakeholders was held on May 21, 2013, with notices given by email, in the newspaper, and on flyers posted around the watershed. To date, there have been a total of five general public stakeholder meetings, plus a workshop.

The announcements, agendas, notes and handouts for all of the stakeholder meetings are posted on the Double Bayou website:

www.doublebayou.org.

See above for more information on the next meeting.

How You Can Help the Water in the Double Bayou Watershed and How the Project Can Help You!

Stakeholders meet in large and small groups to consider and decide what should be incorporated in the Double Bayou WPP. The project team works to bring new information to the meetings of watershed stakeholders, such as: what is the stream water quality and how is it measured? how can septic systems be improved? and, what resources are available to assist wastewater utilities?

The Double Bayou WPP project also brings free training and other resource opportunities to stakeholders through workshops and publications. On June 25, 2013, a Texas Watershed Steward Training was held in Oak Island. This workshop gave Double Bayou stakeholders an opportunity to learn more about watersheds: what they are and how they function, water quality impairments and their causes, and how to have community-driven watershed protection and management. More workshops are coming.

Anyone who lives, works, or plays in the watershed is welcome to participate in workgroups, larger meetings, and workshops. You may learn more and/or join the project by contacting Linda Shead, at 713-703-1123 or linda.shead@sheadconservation.com.

Upcoming Events

- **Tuesday, June 17:**
Stakeholder Meeting
- **Friday, June 27:**
Feral Hog Workshop

Our thanks to the following for providing support to the Double Bayou Watershed Partnership:

For meeting space, equipment, and set-up:

- Chambers County
- Chambers-Liberty Counties Navigation District
- Chambers Recovery Team

For refreshments:

- Chambers County
- Chambers-Liberty Counties Navigation District
- Chambers Recovery Team
- Guy Robert Jackson
- Samson Energy
- Trinity Bay Conservation District

Please add your thanks to ours, when next you see these folks!

Project Partners



Houston Advanced Research Center
4800 Research Forest Drive
The Woodlands, TX 77381

<http://www.doublebayou.org>