DOUBLE BAYOU WATERSHED PARNERSHIP

RECREATION/HUNTING

FIRST WORKGROUP MEETING

Tuesday, November 12, 2013
5:30 - 7:00 P.M.
Chambers Recovery Team
509 Washington Avenue
Anahuac, TX 77514

MEETING NOTES

Attendees: David Boyd (Sierra Club), Becky Fancher, Tyler Fitzgerald (Texas AgriLife Chambers County), Guy Robert Jackson (ChaRT), Travis Lovelace (Anahuac Paddling), Brandt Mannchen (Houston Sierra Club), Jacque White (ChaRT)

Team Members: Kristi Alexander (Shead), Stephanie Glenn (HARC), Brian Koch (TSSWCB), Linda Shead (Shead), Danielle Vinette (Shead)

1.   Welcome, Agenda Review, and Introductions – Kristi Alexander

Kristi thanked everyone for coming, went over the agenda, and then started introductions. She also noted that, for those who want them, watershed plans from other watersheds are available on the Soil Board website. The links will be added to the Double Bayou website.

2.   Review of Water Quality, Impairments, and Potential Sources – Linda Shead

Linda gave a short review of the material in the Texas Watershed Stewards training, which included an overview of water quality and impairments. She noted that the West Fork of Double Bayou is considered impaired, but it is not far from meeting the standards, and the community has an opportunity to clean it up voluntarily before it gets worse, or must undergo required actions to improve the water quality. With a WPP project, the East Fork could also be prevented from getting onto the Impaired list. She stressed the importance of the stakeholders in helping the team members with figuring out the source of potential pollutants.

Linda then presented potential sources of bacteria, such as wastewater treatment plants, septic systems, livestock, wildlife, domestic animals, and feral hogs. She also described the potential causes of low dissolved oxygen, including decomposing matter, high temperatures, and sluggish flow.

A question was asked about chlorophyll-a, which is the substance that makes plants green. The levels suggest that something is happening to increase chlorophyll-a in the water, but chlorophyll-a does not contribute to listing of a stream, based on current standards.

3. **Nine Elements of Watershed Protection Plans – Brian Koch**
And Introduction to Role of Workgroups

Brian Koch reviewed the Watershed Protection Plan process. He reminded everyone that watershed protection plans are flexible and voluntary, and stressed that only the stakeholders approve the plan. The project team will write the stakeholders' ideas into the plan, and bring the plan back to the stakeholders for review, until the stakeholders are satisfied. After that, the EPA looks at the plan, and decides if it meets the requirements to be eligible for grant funding.

Brian then outlined the Nine Elements of a watershed protection plan, which are:
   a. Identify the causes and sources,
   b. Estimate the needed load reduction,
   c. Describe management measures,
   d. Estimate technical and financial assistance,
   e. Plan for information/education,
   f. Schedule for implementation,
   g. Describe measurable milestones,
   h. Criteria for determining if reductions are achieved, and
   i. Monitoring plan to evaluate its effectiveness.

He concluded this section by stating that once the plan is consistent with these elements, and is approved, then, funding becomes available.

Brian then gave a brief presentation of land use in the watershed, reporting that the primary land use is grassland/pasture, and the second is cultivated land. His presentation listed the different land uses in the watershed and a description of each.

Questions were discussed regarding: (a) what's known about the canals – effects on drainage and on water quality; (b) pipelines and potential spill pollution; and (c) effects of grass burning on water quality. [Note: In addition to being discussed at this meeting, these will be added to the list of stakeholder water quality questions.]

Brian stressed that collecting information is a continuous process. He said that stakeholders have been updating the maps, providing more accurate data to plug into the models. He also noted that the percentages of land use in the Double Bayou watershed are very close to those for the whole state, making this area a great model.

4. **Introduction to Watershed Models – Stephanie Glenn**

Stephanie Glenn started her presentation by stating that models are an analytical approximation of the real system, and that models use calculations to get approximations that are as close to the real system as possible. She quoted industry professionals, "Garbage in is garbage out." emphasizing that we need good data to go into the model in order to get good data out.

She then defined a "load," which is a measurement of how much pollutant is in a particular body of water, as well as "best management practices" (BMPs), which are practices that can be put in place to reduce the load. She emphasizes that the watershed model will help target the places that need to be focused on for implementation.

Stephanie discussed two commonly used tools, noting that it will take another year's worth of sampling before one of them can be used, and that the discussion for this meeting will focus on a geographic model– SELECT. SELECT was developed at A&M for use in Texas rural watersheds and uses GIS. GIS (Geographic Information System) is a grid-based system that takes layers of data and puts them on top of each other to build up a map. The map can then be

used to do calculations. Examples of data layer sources that can be used that are relevant to this workgroup are: feral hogs, deer, and land use. The layers are created and then shown to the stakeholders, who then say how accurate the data are and help to tweak it. SELECT will take the watershed and divide it up into smaller drainage blocks. For calculating the loads in SELECT, the where, how many, and how much will be put in. SELECT will then calculate and rank the loads of the contributing sources for the entire watershed. Stephanie gave an example based on a theoretical watershed and dog waste.

5.   Discussion of Potential Sources for this Workgroup – Linda et al

Linda started the discussion by asking the stakeholders to start thinking about potential pollutant sources that are related to recreation and hunting. She continued by saying that once we get all of the information, it will be applied to the model. The team will keep bringing the results of the calculations back for the workgroups to review. Then once the workgroups are satisfied, the team will bring them information about potential Best Management Practices (BMPs).

Using flip charts, Linda collected the group's ideas on potential bacteria sources in this workgroup's category. The following are the results of that discussion:

Recreation/Hunting Activities in the Watershed
- Upland game bird hunting
- Ducks & geese hunting
- Deer hunting
- Feral hog hunting
- Alligator hunting
- Fishing
- Camping/RV
- Sailing
- ATV
- Powerboats
- Kayaking/paddling
- Shooting ranges
- Birding/nature viewing/photography

Potential Sources of Bacteria
- Marine sanitation devices
- Concentration of scavengers
- Disposal of carcasses
- Lack of sanitation facilities

Other Water Pollution Issues
- Vehicle maintenance issues
- Litter
- Lead from shooting rangers and sinkers
- Oil sheen from motor boats
- Sediment from erosion (ATV use)
- Loss of vegetation (ATV use)

6.   Wrap-Up and Next Steps

Linda asked the stakeholders to help identify other people who can help with the two groups that do not yet have volunteers: Residential/Urban/Dumping and Industry/ Oil & Gas. Suggestions were offered of potential contacts for members of those groups.

She then discussed potential meeting dates and frequencies with the group. The next meeting will be early next year and focus on maps. There will be meetings on modeling and on best management practices. In total, she anticipates that there will probably be 4-6 more meetings of this workgroup.

She reminded the group that December 10th is the next big public meeting, and that we aim for the 2nd Tuesday in January for this workgroup meeting.

7.   Adjourn