

**Buffalo Bayou & Lower White Oak Bayou  
Federal Flood Damage Reduction and Ecosystem Restoration Study  
INITIAL STAKEHOLDER GROUP MEETING**

on January 12, 2006

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**Introductions and Welcome**

Wayne Crull, study manager, welcomed the new and returning members of the Buffalo Bayou & Lower White Oak Bayou Federal Flood Damage Reduction and Ecosystem Restoration Study Initial Stakeholder Group meeting.

**Information Topic – Corps Planning Process**

Steve Fitzgerald, Chief Engineer at the District, presented the information topic “Corps of Engineers’ Planning Process –A Sponsor’s Perspective.” James Worthington, the project manager from the U.S. Army Corps of Engineers (USACE), was introduced as part of the federal project team. Other members of the federal project team and local sponsor project team were noted and introduced, if present.

USACE has primary and secondary missions. Its primary missions are navigation, flood damage reduction, and ecosystem restoration. Its secondary missions include recreation and four others (not discussed in this presentation). The USACE and the District’s primary mission in this study is flood damage reduction, but the study team is also investigating ecosystem restoration and potentially recreation, if it is determined appropriate.

Fitzgerald discussed the typical roles of the USACE and the sponsors. In this particular case, the District is working to get this project included in WRDA 1996-Section 211 “Construction of Flood Control Projects by Non-Federal Interests” .

This means:

- The local sponsor takes the lead in the planning, design and construction.
- USACE rules and processes are followed and they monitor and approve the work.
- The cost sharing is the same; although the local sponsor pays all costs up front and is reimbursed the federal share

⇒ Q: Where is the District in the process of this study?

⇒ A: Three years ago, the District requested language be inserted into the Water Resources Development Act asking for this study to be considered for a 211(f) project. The Act is being considered by the U.S. House and the U.S. Senate. Congress has not addressed changes to this Act since 2001. The District is awaiting approval but this is not holding up the study. Because this study has not been approved, the District contracted with the Galveston District, USACE (SWG) so that they can participate in the study. It is the District’s hope that this study will eventually be funded as a 211(f) project.

The cost share of a 211(f) project is broken down as follows:

- USACE pays for planning, design and construction while the sponsor pays for right-of-way; utilities, pipelines and bridge relocations; 5% of the cash of the total cost (structural projects) and operation and maintenance.
- The sponsor's share must be between 25% (35% for "new" projects) and 50% of total cost. Note: The Buffalo Bayou study is an older project so the sponsor's cost share will be 25%.

There are eight steps in the planning process used by the District on federal projects:

1) Identify Problems & Opportunities. The study will reference major storm events in 1992 and 2001 (Tropical Storm Allison) that reflect the impact Buffalo Bayou flooding had on the area. The cut-off meander (or Turkey Bend) east of downtown was also noted as an environmental problem/opportunity.

2) Establish Goals & Objectives. Sample goals and objectives were discussed (e.g., reducing riverine flood damages along Buffalo Bayou). Since this study is in the data collection phase, goals and objectives have not been finalized.

3) Establish Without Project Condition. Includes evaluating historic conditions (TS Frances, TS Allison) and environmental baselines; existing conditions, or data from 2004; and future conditions, which is an evaluation of the condition at the time the project is operational and for 50 years after, if there is no federal project.

4) Component Analysis. Consists of identifying potential components (structural, non-structural), conducting initial screening of effects, and evaluating the benefits/costs.

5) Conduct Alternatives Analysis. Identify potential added-value components and determine whether they increase the net benefits.

6) Identify Plan. A review/evaluation of the net economic development, the national ecosystem restoration, or a combination of both to determine what plan is most appropriate and meets the goals/objectives of the study.

7) Finalize General Reevaluation Report. Includes writing the report and technical reviews and USACE reviews.

8) Review and Approval at the Washington Level. Reviews/approvals by USACE headquarters, as well as from the Assistant Secretary of the Army are required.

For the study to move into the project construction phase, there needs to be Congressional authorization as well as an appropriation of dollars (both Federal and County).

The typical study timeframe is three to seven years. This timeframe is long; and the Federal branch, as much as the local sponsors, want to see the process shortened. To help shorten this timeframe, the District has initiated the study and plans to continue funding the study while working on the issue of federal reimbursement.

The estimated cost of this study is \$5 million.

⇒ Q: What is the Brays Bayou cost share?

⇒ A: Estimated at 35% - 40% local sponsor share, or \$180 million. The total estimated cost of the federal project is \$385 million. For larger, or main channel, projects, federal involvement is sought by the District. Federal involvement on studies of the tributaries are not as attractive primarily due to the high study costs. Not all projects include channel work. Cypress Creek is one example of where the Corps and the District are performing nonstructural work.

⇒ Q: If this study moves forward as an ecosystem restoration project and the District is authorized as a sponsor, can they spend money on this or does it falls outside your policy?

⇒ A: If there are ecosystem restoration benefits to a flood damage reduction project, than yes the District can be the local sponsor. (Clear Creek was used as an example.) If the restoration is away from the system, then no; the District would need to identify other local sponsors. Fortunately this study has the support from the Commissioners as well as the District to move it along. This stakeholder group's interest and presence indicates that there is community interest and support.

⇒ Q: Is it all local money for the study?

⇒ A: Right now, yes. If there is an agreement for a federal project, then there will be a cost-share reimbursement to the District. The caveat is that the District must finish the study and have a project to receive reimbursement.

⇒ Q: What will the cost of the project be?

⇒ A: No idea yet on cost. However, it is important to have a high benefit/cost ratio to secure federal interest.

⇒ Q: Will federal interest change the capital cost?

⇒ A: Yes. Two answers were provided. Monetary interest is calculated, which does alter the project cost. Additionally, a plan must be identified that has federal interest to gain federal funding. If there is no federal interest, any project built will require more local funding.

⇒ Q: If there is high interest locally, will you do the project?

⇒ A: The District conducts local projects in addition to federal projects.

### **Study Status**

Wayne Crull gave the group an overall progress report on the study.

- Economics is 17% complete
- Engineering is 31% complete

- Environmental is 10% complete
- Project management (includes public involvement) is 19% complete

### Economics

The field survey effort, evaluation of existing structures, is 95% complete.

Pilot survey – 20% complete

- Review of 150 parcels.

Precision survey of first floor slab elevations

- Zero-value properties – 90% complete
- Low value properties – 50% complete
  - Defined as HCAD values of <\$500
  - 15 parcels vacant
  - 3 parcels correct
  - 31 to be appraised

Unknowns – 20% complete

- 1,649 structures/properties
- About half are vacant or under construction
- Remainder are being resolved

### Engineering

Traditional Civil Engineering

- Collection of utility information and pipeline crossings – approximately 70% complete
- This information is collected should there be a detention basin or channel project down the road. It's valuable to know what has been moved or relocated so that when the time comes, the responsibility for the cost of relocation can be determined.

Hydraulics & Hydrology – 20% complete

- Using TSARP models as the basis
- In the next 6 months, the models are going to be calibrated against storm events. Later, during the study, the models will be used in analyzing components and alternatives at 8 frequencies (2-, 5-, 10-, 25-, 50-, 100-, 250-, and 500-year).

### Public Involvement and Other Coordination

- Conducted coordination meetings with the Galveston District Dec. 15, 2005
- Stakeholder meetings October 2005, January 2006
- Resource agency meetings

Public Involvement is part of project management. It is a requirement by USACE and NEPA. At this stage of the study, meetings with the stakeholder group fulfill our public involvement requirement. More will be shared about public involvement as the study progresses.

By the April stakeholder meeting, the study team will have met with the resource agencies and the Galveston District, will have an update on economics and engineering, and a large percentage of the environmental data collection will be complete.

⇒ Q: Where is the study in the USACE's planning process?

⇒ A: Very early in the process, not even complete with step 1. The study team must complete the data collection before formalizing Steps 1, 2 and 3. Must also develop an environmental baseline for the watershed.

⇒ Q: How are the floor slab elevations being estimated?

⇒ A: House surveys? Concern that the levels in the various neighborhoods are different. The study team is also using the slab elevations taken by USACE. Darrell Kelsoe, CivilTech Engineering, Inc., will go into more detail at a later meeting.

### **Field Trip**

At the first stakeholder meeting, the members expressed interest in taking a field trip of the study area. Some suggested points of interest are Barkers Reservoir, Piney Point, Terry Hershey Park, Memorial Park, Hogg Place, Turning Basin.

The purpose of the trip is to take a detailed look at the reach of the study area (for those that are not familiar with it) and engage in two-way discussion to learn more about the bayous.

Study members also suggested Turkey Creek outfall and Stude Park are field trip points of interest. A bus trip will take approximately five hours. The last week of March was proposed. Wayne Crull will be following up with the stakeholder group to confirm a date.

⇒ Q: Does this study include the dams? If not, why?

⇒ A: The study area stops immediately downstream of the dams. They are separate but their hydrology and hydraulics indirectly impact the bayou. The dams have never been at capacity.

Not directly related to this study effort, the District is cooperating with the Corps on a study examining the release of flows from the reservoirs and various communication issues relating to this study.

### **Communications**

Claudia Morlan, of Elmore Public Relations and consultant to the District on this study, welcomed new members to the group. She reiterated that the public involvement phase of the study right now is the engagement of the initial stakeholder group.

Materials will be distributed at every meeting with follow up of meeting notes. It was noted that several stakeholder group members requested binders and those will be provided.

**Next Meeting**

The next proposed group meeting date is Thursday, April 13, 2006, at 2 p.m. at the Flood Control District.