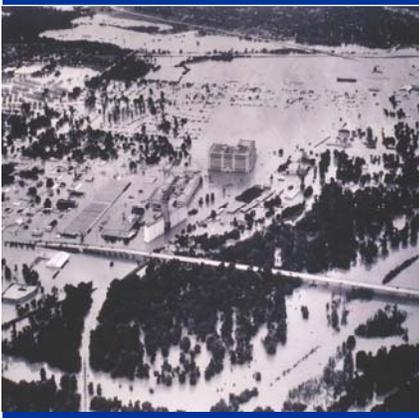


Upper Trinity River Central City Fort Worth, Texas

Final Supplement No. 1
to the Final
Environmental Impact
Statement



Prepared by:
U.S. Army Corps of Engineers
Fort Worth District



March 2008



Rendering Image courtesy of CDM



Site Findings

Cost was one component in the overall evaluation of the storage mitigation sites. Other factors, such as proximity to other improvements, project staging, impacts to existing vegetation, implementation, and ecosystem improvement opportunities were also considered in the final findings. Based on this evaluation, several potential valley storage mitigation sites were identified as favorable to include the Community Based Alternative. The largest site is located approximately three miles upstream of University Drive on the West Fork, and is referred to as the Riverbend site (See Figure 3-13). Through a combination of partial levee removal and excavation, it is estimated that approximately 3,200 acre-feet of valley storage could be created in the Riverbend area. Development of the specific grading plan for this area incorporates opportunities to develop ecological value in conjunction with meeting valley storage requirements. This is described in more detail in subsequent sections. Additional sites located downstream of the proposed Samuels Avenue Dam, between the dam and Interstate Highway 35 were also identified as suitable sites for additional valley storage mitigation.

Utilizing a combination of the Riverbend site and the sites downstream of Samuels Dam would result in valley storage mitigation of approximately 4,050 acre-feet. However, an additional 1,200 acre-feet of valley storage mitigation would be required to fully mitigate valley storage loss associated with the hydraulic elements of the Community Based Alternative.

Drawdown Alternatives

In addition to excavating replacement storage, storage lost due to drawdown can also be mitigated by providing structures or channel roughness to reduce or eliminate the drawdown. However, constricting or otherwise impeding the flow in the bypass channel below the West Fork/Clear Fork confluence is not feasible because it would create unacceptable water surface elevation increases upstream on the Clear Fork. Drawdown mitigation analyses accordingly focus on West Fork sites upstream of the confluence to the bypass channel, and are summarized below.

Channel Dam

A channel dam could be constructed in the West Fork upstream of the confluence with the bypass channel to mitigate or eliminate the drawdown. This concept was rejected because it would impede water craft passage and detract from the aesthetics of the Community Based Alternative.

Large Bridge

A large bridge that would act as a dam during high flows could be constructed on the West Fork upstream of the FW&W Railroad Bridge to mitigate drawdown by allowing water craft passage through restricted flow conveyance openings while impeding flood flows. However, a large bridge would obstruct views of the FW&W Railroad Bridge and Downtown and would require a very wide cross-sectional area for structural integrity. The thickness of the proposed structure would be viewed as an impediment to pedestrian traffic on trails adjacent to the river. This type of bridge would also be extremely expensive to construct.

Channel Obstructions/Modifications

Various combinations of channel modifications to impede flood flows were also considered for the area between University Drive and the FW&W Railroad. Possible obstructions included partially filling the channel, constructing transverse dikes in the floodplain, and installing grade control