# US Army Corps of Engineers Flood Hazard Mitigation and Ecosystem Restoration Project Feasibility Study Onion Creek and Williamson Creek Watersheds

# **Project Need**

- Over 1,000 residential house structures and numerous roadway crossings are in the floodplains of Onion Creek and Williamson Creek. The primary flood prone areas are along lower Onion Creek in the vicinity of the intersection of East William Cannon Drive and Pleasant Valley Road and along Williamson Creek between Westgate Drive and Congress Avenue.
- Over 300 houses in these watersheds experienced flooding during the October 1998 flood event.
- Over 400 houses in these watersheds experienced flooding during the November 2001 flood event.

### **Project Benefits**

- This project is being conducted in partnership with the City of Austin, the U.S. Army Corps of Engineers, Travis County, the City of Sunset Valley and the Lower Colorado River Authority (LCRA).
- Federal cost share for project implementation is up to 65 percent, which provides significant economic leveraging of City funds.
- Federal funding for project implementation will provide flood protection for large numbers of houses and roadways, and restoration of degraded riparian areas in the watersheds.
- Working with the Corps of Engineers, LCRA, City of Sunset Valley and Travis County provided a large unified local front in pursuit of federal funds to support project implementation.

#### **Council Authorization History**

06/22/2000 - Interlocal Agreement with LCRA approved.

03/21/2002 – Approved Amendment #1 which added the City of Sunset Valley, modified the Statement of Services to Be Performed, and modified the Payment for Services.

04/24/2003 – Accepted Texas Water Development Board Planning Grant in the amount of \$399,375 for a portion of the cost share for the U.S. Army Corps of Engineers' Onion and Williamson Creek Watersheds, Flood Control and Environmental Restoration Feasibility Study.

10/09/2003 – Approved Amendment #2 which superseded previous agreements, and modified the Statement of Services to be Performed and Payment for Services.

#### **Background**

In December 2006, the Corps completed the Feasibility Study (in City terminology, Preliminary Engineering) to evaluate flooding conditions and to identify feasible flood hazard mitigation solutions and environmental restoration projects for the Onion Creek and Williamson Creek watersheds. The study included economic evaluation of the flood hazard protection benefits and project implementation costs associated with project alternatives. Both structural and non-structural (floodplain buyout) flood control solutions were evaluated in the Feasibility Study.

The Feasibility Study recommended that improvements in the two watersheds proceed as two separate projects.

1. Onion Creek Flood Hazard Mitigation, Ecosystem Restoration, & Recreation
The Corps recommended evacuation (buyout) of all houses in the 25-year floodplain. The total number of houses proposed for buyout is 410, some of which have already been purchased by the City using City-only dollars and some have been purchased using FEMA Hazard Mitigation Grant Program (HMGP) funding. The project also includes ecosystem restoration and recreational facilities.

Economically viable projects have been presented to the U.S. Congress for funding consideration to support project implementation. On November 8, 2007, the U.S. House of Representatives and the U.S. Senate voted to override the President's veto of the Water Resource Development Act of 2007 which authorizes the project for Federal implementation funding up to \$46,000,000 and allows credit for approximately \$4,000,000 spent to date by the City to purchase houses in the Onion Creek watershed. WPDRD will return to Council for consideration of a new Interlocal Agreement for project design and implementation.

## 2. <u>Williamson Creek Flood Hazard Mitigation and Ecosystem Restoration</u>

The Corps completed the Interim Feasibility Study but was not able to recommend a solution in the Williamson Creek watershed due to the high cost of land associated with ecosystem restoration. The City is evaluating the Corps proposal for further re-evaluation.

Because of unanticipated Federal operations funding constraints during FY07, the Corps was not able to progress to an executed service agreement during FY07. It is anticipated that agreement will be reached with the Corps before the end of the calendar year (2007) with concurrent work start. At that time, WPDRD will return to Council for consideration of a new Interlocal Agreement for project design and implementation.