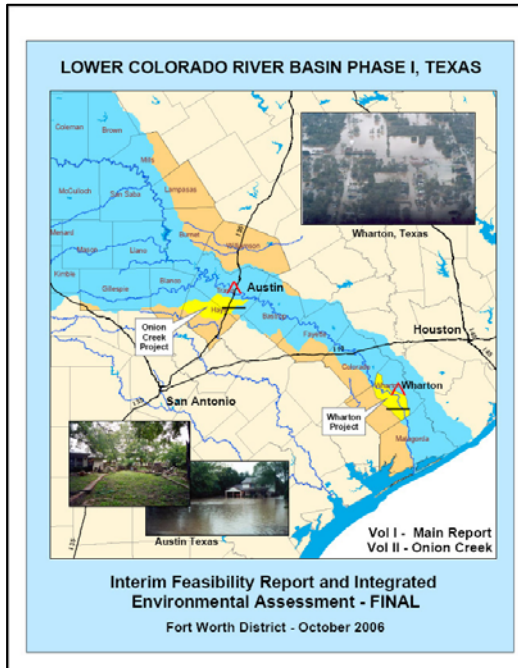


Lower Colorado River Basin Phase 1, TX

12 October 2006



Abstract: The study area addresses two sites located within the Lower Colorado River basin in Wharton County, Texas, including the city of Wharton, and the Onion Creek watershed. Wharton County encompasses an area of 1,095 square miles. The city of Wharton is the county seat, located near the center of Wharton County. The Onion Creek watershed encompasses approximately 343 square miles and is located primarily in southern Travis and northern Hays Counties, with a minor part of the upper portion of the basin extending into eastern Blanco County. The Williamson Creek watershed, which is one of the focal points in the study, encompasses approximately 31 square miles, has a river-length of approximately 17.5 miles (from Onion Creek to the headwaters) and lies entirely within Travis County. Williamson Creek originates southwest of the city of Austin near the Balcones Escarpment and flows about 17.5 miles before its confluence with Onion Creek near Austin-Bergstrom International Airport.

In Wharton County the NED plan was selected as the Recommended Plan and includes approximately 20,300 feet of levees (5 feet average height) and 1900 feet of floodwalls (4 feet average height) along the Colorado River, 6600 feet of levees (3 feet average height), 380 feet of floodwalls, and 7000 feet of channel modification (3 feet average height) along Baughman Slough, and three significant features to facilitate the drainage of Caney Creek. Some refinements of the plan were incorporated into the Recommended Plan, with the most significant being the incorporation of additional interior drainage facilities to adequately address any ponding issues resulting from implementation of the levee system. The plan would effectively remove the vast majority of the city of Wharton from the designated 1% chance floodplain.

In the Onion Creek Watershed area the NED/NER plan consisted of the removal of structures in the floodplain and construction of recreation facilities and restoration of riparian habitat. At Timber Creek the plan consists of the acquiring and removing 81 residential structures and 90 parcels of land in the 4% ACE floodplain. The plan would combine recreational features including 20 picnic shelters, 8 small group shelters, 1 large group shelter, 5,300 feet of unpaved trails and 1,200 feet of paved 10 foot wide trails, 2 basketball courts, one waterborne restroom, 12,000 square feet of parking, and the infrastructure associated with these facilities on 40 acres of land. The ecosystem restoration would include restoring riparian woodlands on an additional 16 acres. At the Onion Creek Forest/Yarrabee Bend site the plan consists of acquiring and removing 410 residential structures located in the 4% ACE floodplain. Recreational features include 32 picnic shelters, 32 small group shelters, 1 large group shelter, 7,860 feet of unpaved trails and 9,680 feet of paved 10 foot wide trails (including 1 footbridge), 7,400 feet of equestrian trails, 4 basketball courts, 2 tennis courts, 19 volleyball courts, one waterborne restroom, 20,000 square feet of parking, and the infrastructure associated with these facilities. The Recommended Plan would result in a 100-acre park. Approximately 190 additional acres would be restored to riparian woodlands.

With this project most of the City of Wharton would be removed from the FEMA 100-year floodplain, where the expected annual flood damages in the Wharton area would be reduced by 65 percent. The flood damage reduction measures within the Timber Creek segment of the Onion Creek watershed would remove approximately 81 residential structures from the 4 percent annual chance of exceedence (25-year) floodplain. The removal of these properties and the reuse of the land for recreation and ecosystem restoration would result in estimated equivalent annual benefits of \$850,000, and net annual benefits of \$330,000 with a benefit to cost ratio 1.6.

The flood damage reduction measures within the Onion Creek Forest/Yarrabee Bend segment would remove approximately 410 residential structures from the 4 percent annual chance of exceedence (25-year) floodplain. The removal of these properties and the reuse of the land for recreation and ecosystem restoration would result in estimated equivalent annual benefits of \$5,160,000 and net annual benefits of \$1,630,000 with a benefit to cost ratio of 1.5. Equivalent annual benefits for the recommended flood damage reduction project in Wharton are estimated at \$3,640,000. This results in equivalent annual net benefits of \$1,960,000, and a benefit-to-cost ratio of 2.2.

Report Documentation: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- [CWRB Agenda](#)
- [Project Summary](#)
- [CWRB Briefing Slides](#)
- [CWRB Lessons Learned](#)
- [CWRB Meeting Record](#)
- [Comment Letters](#)
- [Documentation of Review Findings](#)
- [Signed Chief of Engineers Report](#)
- [ASA\(CW\) Memo to OMB](#)
- [OMB Clearance](#)
- [Congressional Notification](#)
- [Finding of No Significant Impact](#)
- Authorization
 - [Section 1001 \(43\) WRDA 2007](#)
 - [Full WRDA Text](#)

Additional Information:

[Southwestern Division](#)

[Fort Worth District](#)

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