Abstract: May Branch, a small urban tributary to the Arkansas River, is located in northwest Arkansas near the Oklahoma border. The stream lies entirely within the city limits of Fort Smith, Sebastian County, Arkansas. May Branch originates in the south central section of the city and flows to the north and northwest to the Arkansas River. The study reach is from the confluence of May Branch with the Arkansas River upstream approximately 3 miles.

The Proposed Pan is the Locally Preferred Plan and consists of an open channel that would extend for 2.25 miles from the Arkansas River upstream to Grand Avenue. An extension of the channel would add 0.5 miles to Park Street. From 0 Street to the Fort Smith (Arkansas River) Levee, the new open channel would augment the flow capacity of the P Street Storm Sewer. There would be covered channel sections at road (except for three road bridges) and railroad crossings and a gated control structure through the levee at the Arkansas River. The channel slopes would be rip-rapped, except for a short vertical concrete wall section, and a 1,500-foot long segment downstream of Grand Avenue where the channel has concrete-lined side slopes to avoid area buildings. Fifteen (15) structure relocations will be required.

The LPP meets the needs of the local community. At about 78.6 percent additional cost greater than the National Economic Development (NED) plan, the LPP plan provides greater flood reduction benefits and removes the maximum number of structures from the 100-year floodplain, (126 structures versus the 87 structures for the NED plan). The LPP is economically justified without significant adverse impact to the environment.

Project implementation could eliminate approximately $1.7 million in expected annual flood damages within reaches 1 through 4. This would constitute about a 96-percent reduction expected damages along this portion of the stream corridor. Residual flood damages would still be expected to occur in reaches 5 and 6. With project implementation 127 structures would no longer be located within the 100-year flood plain. Consequently, the project has the potential to reduce future net Federally-subsidized reimbursements for flood losses. The recommended LPP would nearly eliminate the flood damages expected to be caused by a flood that has a 1.0-percent chance of occurring in any given year (100-year event). The recommended plan would also diminish flood damages for events larger than the 1.0-percent chance event by decreasing flood stages and increasing the chances of successful emergency flood fighting. The project would also reduce highway and railroad traffic interruptions, lessen flood-induced disruptions to the delivery of health and safety services, and decrease the threat of loss of life attendant to flash flooding in urban settings.
**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 (7) WRDA 2007**
  - **Full WRDA Text**

**Additional Information:**

**Southwestern Division**

**Little Rock District**

**May Branch Project Information**