## Licking River Basin, Cynthiana, Kentucky 24 March 2006



Abstract: The recommended project would reduce flood damages in the communities of Cynthiana, Millersburg, and Paris, in the Licking River Basin, Kentucky, by the construction of two dry bed detention basins on tributaries of the South Fork of the Licking River. The two basins would be created by constructing roller compacted concrete dams on the Hinkston Creek and Strodes Creek tributaries. The Hinkston Creek detention structure, located just upstream of the Town of Millersburg, would have a height of about 30 feet, a

length of about 680 feet, and would create a pool with a maximum volume of about 8,188 acrefeet given an occurrence of the 0.2 percent chance (500-year) flood. The detention facility would include a 200-foot-long spillway, a 16-foot-wide by 12-foot-high gravity outlet, and a 1,500-footlong access road. The Strodes Creek detention structure, located about 16 miles upstream of the town of Paris, Kentucky, would have a height of about 25 feet, a length of about 700 feet, and would create a maximum pool of about 3,923 acre-feet during the 0.2 percent chance flood. It would include a 150-foot-long spillway, a 12-foot-wide by 10-foot-high gravity outlet, and an 8,000-foot-long access road. Mitigation for unavoidable environmental impacts associated with the proposed project would consist of 90 acres of hardwood plantings on project lands to offset the impacts of the detention structures on the existing riparian hardwood corridors in the vicinity of the proposed project.

The estimated first cost of the recommended plan is about \$17,460,000. Cost sharing for the initial project would be 65 percent (\$1 1,350,000) Federal and 35 percent (\$6,110,000) non-Federal The non-Federal sponsor, the City of Cynthiana, represents a consortium of local and State interests. Further, the non-Federal sponsor would be responsible for 100 percent of the operation, maintenance, repair, replacement, and rehabilitation of project features, a cost currently estimated at \$25,000 per year.

Average annual flood damage reduction benefits associated with the recommended plan are estimated at \$3,350,000. With annual costs of \$1,096,000, the resulting benefit-to-cost ratio would be 3.1 to 1. Net benefits would total \$2,254,000. The proposed plan is the national economic development (NED) plan. The proposed project would reduce expected annual damages from flooding in the communities of Cynthiana, Millersburg, and Paris, Kentucky by about 86 percent.

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

- <u>CWRB Briefing Agenda</u>
- Project Summary
- <u>CWRB Briefing Slides</u>
- <u>CWRB Lessons Learned</u>
- <u>CWRB Meeting Record</u>
- <u>Comment Letters</u>
- Documentation of Review Findings
- Signed Chief of Engineers Report
- Transmittal to OMB
- OMB Clearance
- <u>Congressional Notification</u>
- Finding of No Significant Impact
- Authorization
  - o <u>Section 1001 (22) WRDA 2007</u>
  - o Full WRDA Text

## Additional Information:

**Great Lakes and Ohio River Division** 

**Louisville District**