



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
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WASHINGTON, D.C. 20314-1000

CECW-ZB

13-Mar-23

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

SUBJECT: BELL COUNTY, KENTUCKY, SECTION 202 FLOOD RISK MANAGEMENT PROJECT, Final Detailed Project Report and Environmental Assessment

1. Purpose: This memorandum transmits for your information, my approval of the Bell County, Kentucky, Section 202 Flood Risk Management Detailed Project Report and Environmental Assessment (EA). The report as provided contains the identification, evaluation, and recommendation of measures, alternatives, plans, and costs necessary to reduce the risk of flooding to property and life safety in the Bell County, Kentucky study area. The non-federal sponsor for the project is Bell County, Kentucky.

2. Study/Project Authorization and History: The authority to study and implement the flood risk management project is as follows:

Section 202 of Public Law 96-367

“(a) The Secretary of the Army, acting through the Chief of Engineers, is authorized and directed to design and construct, at full federal expense, such flood control measures at or in the vicinity of (1) Pikesville, Kentucky and of Grundy, Virginia, on the Levisa Fork of the Big Sandy River. (2) Pineville, Kentucky, on the Cumberland River, and (3) Williamson and Matewan, West Virginia, on the Tug Fork of the Big Sandy River, as the Chief of Engineers determines necessary and advisable to afford these communities and other flood damaged localities and their immediate environs on both the Levisa and Tug Fork of the big Sandy River and Cumberland River a level of protection against flooding at least sufficient to prevent any future losses to these communities from the likelihood of flooding such as occurred in April 1977, at an estimated cost of \$284,000,000. Non-federal interests shall hold and save the United States free from damages due to construction works referred to in this section, and maintain and operate all such works after their completion in accordance with regulations prescribed by the Secretary of the Army. (b) There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this section. (c) The Congress finds that the benefits attributable to the objectives set forth in section 209 of the Flood Control Act of 1970 exceed the cost of the flood control measures authorized by this section.”

3. Background: The study area is Bell County, located in southeastern Kentucky. It includes all areas likely to be impacted by a recurrence of the April 1997 flood that were not addressed by other Section 202 projects in Pineville and Middlesborough. In general, this area includes the Cumberland River from the Harlan/Bell County line (river mile (RM) 677) to the downstream limit of the Bell/Knox County line (RM 649), Straight Creek from its mouth to RM 15.1, Left Fork of Straight Creek from its mouth to RM 6.2, and Yellow Creek

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from its mouth to RM 11.4. Due to the magnitude of the flooding on the Cumberland River during the April 1977 storm, backwater flooding resulted on several small tributaries along the Cumberland River, including Brownies Creek up to mile 2.4, Hances Creek up to mile 0.8, Bird Branch up to mile 0.3, Clear Creek up to mile 1.1, Turkey Creek up to mile 0.4, Fourmile Creek up to mile 0.6, and Greasy Creek up to mile 4.0. While the study area is the entire county, the project area was defined by where the eligible structures (per Section 202 authority) were located. Therefore, the project area is centered around the City of Pineville along the Cumberland River and its tributaries.

4. Recommended Plan: Based on the analyses conducted, the federally recommended plan is a voluntary, nonstructural plan consisting of flood proofing measures for 212 eligible structures: 155 eligible for permanent removal (buyout), 33 for raising-in-place, 19 for replacement in-kind (structure's condition does not allow raising), and 5 for dry floodproofing. The plan also includes the development of a Flood Preparedness Plan. This plan was identified as the least costly plan to prevent flood damages from the recurrence of April 1977 flood that was socially, financially, and environmentally implementable, pursuant to the Section 202 authority.

5. Project Cost: Economic analysis for the project was conducted for the purposes of ability to pay analysis. Project estimated costs is the cost estimate for the current fiscal year (FY) and is used for economic analysis. Project First Cost is the estimated cost escalated to price level of authorization. Fully Funded project cost is the cost escalated to the midpoint of construction and is used in the project partnership agreement (PPA) between USACE and the non-federal sponsor. The recommended plan for 212 structures, has a total first cost of \$93,089,000 (1 October 2022 price level). The fully funded cost is \$105,605,000. Ability to pay analysis was done to determine the cost sharing requirement for Bell County and resulted in a cost share of 95% federal and 5% non-federal. The feasibility costs for Section 202 projects are federally funded up front and the non-federal Sponsor will be required to pay back the required cost sharing percentage during the implementation phase. After the execution of the PPA, Bell County, KY will be responsible for 5% of feasibility and fully funded implementation costs. The non-federal Sponsor will be responsible for providing lands, rights-of-way, easements, relocations, disposal areas (LERRDs). With Section 202, buyouts fall under LERRDs cost, so these will exceed the non-federal sponsor's 5% cost share. The LERRDs costs for this project total \$61,337,000 (\$56,683,000/\$4,654,000 federal/non-federal). Operation, Maintenance, Repair, Rehabilitation, and Replacement (OMRR&R) total estimated annual costs is \$20,000 and include the following: yearly inspection of floodproofed residences, clearing, mowing, and debris removal in the vicinity of three non-recording gages, updating the modelling, mapping, and preparedness products, conducting tabletop exercises with technical staff and emergency responders to evaluate flooding impacts, response, and recovery efforts and provide education and outreach to community to inform them of flood risks base FPP and other risk related products.

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6. Economic Evaluation: This project is not being justified solely on the basis of National Economic Benefits (NED). Section 202 (c) of Public Law 96-367 states in part “The Congress finds that the benefits attributable to the objectives set forth in Section 209 of the Flood Control Act of 1979 exceed the cost of flood control measures authorized by this section.” Thus, benefit-to-cost ratios and net benefits are not used to identify the optimum economic plan. Rather, the optimum plan is the least costly plan, which is judged to be socially, financially, and environmentally implementable. Benefits for the project can be accounted for principally as “Other Social Effects” and include reduction in population at risk for life safety due to flood conditions, improved financial stability, and preservation of community cohesion.

7. Environmental Compliance: An EA and Finding of No Significant Impact (FONSI) were developed to assess project impacts and meet the compliance requirements of the National Environmental Policy Act and other applicable federal and state environmental, tribal, and cultural resources laws and requirements. Coordination with the resource agencies indicated the recommended plan may affect but is not likely to adversely impact the Indiana bat, gray bat, northern long-eared bat, Blackside Dace, Cumberland Darter, Kentucky Arrow Darter, Cumberland Elktoe, Sheepnose, and Snuffbox mussels. Additionally, the recommended plan has the potential to affect archaeological sites and historic properties under 36 CFR 800.4(d)(2). A Programmatic Agreement outlining the mitigation stipulations to resolve adverse effects to historic properties was executed with the State of Tennessee Historic Preservation Office on June 24, 2022.

8. Conclusion and Recommendation: I report that the proposed nonstructural plan for Bell County, Kentucky is environmentally acceptable and engineeringly feasible pursuant to the Section 202 authority. The proposed nonstructural plan for flood damage reduction complies with all applicable Corps planning procedures and regulations. Views of interested parties, including federal, state, and interested parties have been considered. I support the approval of the recommended plan for the Bell County, Kentucky, Section 202 flood risk management project, as proposed. I approve the decision document and request you support and assist in budgeting for the recommended plan.

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EDWARD E. BELK, JR. P.E.
Director of Civil Works

5 Encls:

1. Report Summary
2. Project Placemat
3. Peer and Legal Review Certifications
4. Policy Review - Documentation of Review Findings
5. Office of Management and Budget Briefing Slides