



FINDING OF NO SIGNIFICANT IMPACT

VALLEY CREEK FEASIBILITY STUDY INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT BESSEMER AND BIRMINGHAM, ALABAMA

The U.S. Army Corps of Engineers (USACE), Kansas City District has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated **October 22, 2021**, for the Valley Creek Feasibility Study addresses flood risk management opportunities and feasibility in the area of Bessemer and Birmingham, Alabama. The final recommendation is contained in the report of the Chief of Engineers, dated **October 29, 2021**.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would reduce flood risk in the study area. The recommended plan is the National Economic Development (NED) Plan and includes:

- The recommended plan includes two overbank detention basins each with an inlet weir, containment berm, and outlet structure. Detention Area 1 (VD1) comprises approximately 10.0 acres on the left overbank of Valley Creek downstream of Center Street. Detention Area 2 (VD2) comprises 19.8 acres on left overbank downstream of Princeton Parkway. Recreation features to include trails are incorporated in the plan. Site preparation includes acquiring necessary lands, easements, and right of ways; performing necessary relocations; procuring proper disposal location or locations; demolition and disposal of necessary material including material generated from clearing, grubbing, or stripping necessary vegetation.
- Compensatory mitigation for fish and wildlife impacts resulting from the loss of 5.6 acres (4.3 average annual habitat units) of bottomland hardwood forest would be achieved by purchasing 5.0 bottomland hardwood credits at the Big Sandy Mitigation Bank. The compensatory mitigation analysis is included in Appendix H of the Final IFR/EA.

In addition to a “no action” plan, 13 alternative plans were evaluated as part of the initial array and four final array alternatives were evaluated. The alternatives included a plan with three overbank detention areas, the recommended plan with two overbank detention areas, and a plan that included channel modification, bridge modifications, and a buyout within the 2-year floodplain of approximately 79 properties. The plan formulation for the study is described in Chapter 4.0 of the Final IFR/EA.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1:



Table 1: Summary of Potential Effects of the Recommended Plan

	Less than significant effects	Less than significant effects as a result of mitigation*	Resource unaffected by action
Hydrology and Hydraulics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geology and Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Quality/Aquatic Habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wetlands and Waters of the U.S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Terrestrial Habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and Wildlife	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species/critical habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Health and Safety	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Cover and Land Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Socio-economics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental justice	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prime and Unique Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cultural Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the IFR/EA will be implemented, if appropriate, to minimize impacts. BMPs necessary to prevent water quality related impacts are detailed in Appendix G of the Final IFR/EA.

Public review of the draft IFR/EA and FONSI was completed on July 1 2020. No comments were submitted during the public review period. A 30-day state and agency review of the Final IFR/EA was completed on **October 20, 2021**. Comments from state and federal agency review did not result in any changes to the final IFR/EA.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, USACE determined that the recommended plan may affect but is not likely to adversely affect the following federally listed species or their designated critical habitat: Indiana bat, gray bat, northern-long-eared bat, and watercress darter. The U.S. Fish and Wildlife Service concurred with the Corps' determination on June 20, 2020.




Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, USACE determined that historic properties may be adversely affected by the recommended plan. The Corps and the Alabama Historical Commission, State Historic Preservation Office entered into a Programmatic Agreement (PA), dated February 6, 2021. All terms and conditions resulting from the agreement shall be implemented in order to minimize adverse impacts to historic properties.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix G of the IFR/EA.

Pursuant to the Clean Water Act Section 401, as amended, a water quality certification would be obtained from the Alabama Department of Environmental Management prior to construction. Construction of the detention basins would not likely have a measurable effect on water quality or aquatic habitat within Valley Creek. BMPs would be implemented during and following construction to reduce potential negative effects to water quality.

All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, the reviews by other Federal, State and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

28 June 2022
Date


Travis J. Rayfield, PE, PMP
Colonel, Corps of Engineers
District Commander