

DRAFT 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) 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 TBD for the Valley Creek Feasibility Study addresses flood risk management opportunities and feasibility in Bessemer and Birmingham, Alabama. The final recommendation is contained in the report of the Chief of Engineers, dated Day Month, Year.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would achieve flood risk management benefits in the study area. The recommended plan is a Locally Preferred Plan (LPP) and includes three 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 13.6 acres on left overbank downstream of Princeton Parkway.
- Detention Area 4 (VD4) comprises 16.4 acres on left overbank at Lincoln Ave.

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.

Alternatives Considered:

In addition to a “no action” plan, 13 alternative plans were evaluated as part of the initial array of alternatives and four were included in the final array of alternatives.¹ The plan formulation process initially identified 48 possible measures to implement in the study area, 35 structural and 13 non-structural. Of the initial 48, some measures were determined infeasible or not effective. Final measures were used to develop a suite of alternatives comprised of structural measures only, non-structural measures only, or a combination of structural and non-structural measures. Measures that were evaluated included overbank detention, levees, channel modification, bridge modifications, and buyouts. The alternatives included in Chapter 4.0 of the IFR/EA, entitled “Formulation of Alternatives”, provides the detailed information for the alternative formulation process and rationale used for final selection of the Tentatively Selected Plan (TSP).

Alternative 13 (channel and bridge modification combined with a residual risk 2-year floodplain buyout) is considered the National Economic Development (NED) plan, however, the non-federal sponsors have expressed concern over difficulty with implementing large acquisition plans. The sponsors have experience with implementing acquisition plans, most notably on an adjacent watershed (Village Creek) through Public 99-662 Section 401. Volunteer acquisition

¹ 40 CFR 1505.2(b) requires a summary of the alternatives considered.

programs are available through the local sponsors but use is minimal. It is highly unlikely for an acquisition plan to be socially acceptable by local communities as strategic acquisition of frequently damaged structures would disrupt neighborhood cohesion and connectivity with other communities along Valley Creek. Local sponsors have expressed their desire to invest in Alternative 3 (three overbank detention basins). Alternative 3 provides the next highest mean annual benefits in flood risk reduction and provides those benefits throughout the corridor. Alternative 3 is compatible with the Red Rock Ridge and Valley Trail System Plan (Red Rock Plan). One of the trail corridors within the Red Rock Plan is the Jones Valley Corridor, which is drained by Valley Creek. A recreation component in the form of trails can support the Jones Valley Corridor. For these reasons, Alternative 3 plus recreational amenities is the locally preferred TSP.

Summary of Potential Effects:

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the TSP are listed in Table 1 below. See Chapter 2.0 “Existing Conditions and Affected Environment”, Chapter 3.0 “Future Without Project Condition”, and Chapter 6.0 “Environmental Consequences” of the IFR/EA for a detailed description of existing human and natural resources, future without project conditions, and potential environmental consequences associated with the TSP.

Table 1: Summary of Potential Adverse Effects of the TSP

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and wildlife habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species/critical habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic properties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other cultural resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous, toxic & radioactive waste	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydrology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Socio-economics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Environmental justice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Flood Risk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Recreation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prime and Unique Farmlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The TSP is anticipated to result in beneficial impacts to hydrology and hydraulics, water quality, public health and safety, land use, socioeconomics, transportation and critical infrastructure, and recreation. The TSP would have no effect on climate change, navigation, or prime and unique farmlands. All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the proposed TSP. Best management practices (BMPs) as detailed in the IFR/EA will be implemented, if appropriate, to minimize impacts.² There is potential to encounter HTRW within one or more detention basin areas under the TSP. Should contamination at any area be identified, it would be the non-federal sponsor's responsibility to perform necessary corrective actions prior to making the lands available for the project.

Minor, insignificant adverse effects to the following resources would be avoided, minimized with Best Management Practices (BMPs) or mitigated as possible:

- Waters of the U.S. – The TSP is anticipated to impact 3.7 acres of forested wetland within the footprint of VD4. These acres provide 2.8 average annual habitat units. Wetland impacts will be fully mitigated.
- Water Quality – Construction of the detention basins would not likely have a measurable effect on water quality or aquatic habitat within Valley Creek. Construction activities could result in short-term increases in turbidity. BMPs would be implemented during and following construction to reduce potential negative effects to water quality. A Section 401 Water Quality Certification will be obtained from Alabama Department of Environmental Management.
- Threatened and Endangered species – Any necessary tree clearing would be restricted to the non-active period of October 15 to March 31 to avoid any impacts to federally-listed bat species.
- Terrestrial Habitat/Fish and Wildlife – The TSP would result in the loss of approximately 7.1 average annual habitat units of riparian forest habitat. It is estimated that approximately 18.5 acres of tree planting would be completed to mitigate for tree clearance. Once constructed, detention basins would be re-vegetated with native grass species; it is assumed that tree growth within the basins would not be allowed because trees would reduce the volume of the basin available to hold stormwater.
- Cultural Resources – Due to the potential to effect unknown, buried cultural resources with proposed ground-disturbing activities, a Programmatic Agreement (PA) to fulfil responsibilities under the National Historic Preservation Act (NHPA) will be executed as part of the TSP. The Alabama State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP), federally recognized Native American Tribes, and other interested parties were invited to participate in the development of the PA. The official correspondence on the PA is included in Appendix X Agency/Public Coordination.

Public review of the draft IFR/EA and draft Finding of No Significant Impact (FONSI) was completed on Day Month, Year. All comments submitted during the public review period were responded to in the Final IFR/EA and FONSI.

² 40 CFR 1505.2(C) all practicable means to avoid and minimize environmental harm are adopted.

OTHER ENVIRONMENTAL AND CULTURAL COMPLIANCE REQUIREMENTS:

Endangered Species Act (ESA) – Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan may affect but is not likely to adversely affect the following federally listed species or their designated critical habitat: gray bat, Indiana bat, and northern long-eared bat. Potential effects would be avoided by adherence to seasonal restrictions on tree clearing. A determination of no effect was made for the watercress darter. The U.S. Fish and Wildlife Service (FWS) concurred with the Corps' determinations on X Date 2020. Appendix E of the EA includes the record of consultation with FWS.

Fish and Wildlife Coordination Act (FWCA) – As requested by FWS, FWCA input was requested as part of the agency's review of the draft integrated feasibility report and environmental assessment. All recommendations from FWS regarding impacts to fish and wildlife have been responded to in the final report.

National Historic Preservation Act (NHPA) – Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that there is potential to affect historic properties by the TSP. The Corps invited the Alabama SHPO, ACHP, federally recognized Native American Tribes, and other interested parties to participate in the development of a Programmatic Agreement (PA), dated Day Month, Year. All terms and conditions resulting from the agreement shall be implemented in order to minimize adverse impacts to historic properties.³

Clean Water Act (CWA) – Construction of the detention basins fall within the scope of Nationwide Permit 43, Stormwater Management Facilities. Construction activities would comply with the Alabama 401 water quality certification conditions associated with Nationwide Permit 43.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

FINDING:

Technical, environmental, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives.⁴ 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

³ Required by 36 CFR 800.6(c)(3) meeting the terms and conditions of the Memorandum of Agreement (MOA).⁴ 40 CFR 1505.2(B) requires identification of relevant factors including any essential to national policy which were balanced in the agency decision.

⁴ 40 CFR 1505.2(B) requires identification of relevant factors including any essential to national policy which were balanced in the agency decision.

effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.⁵

Date

William C. Hannan, Jr.
Colonel, Corps of Engineers
District Commander

⁵ 40 CFR 1508.13 stated the FONSI shall include an EA or a summary of it and shall note any other environmental documents related to it. If an assessment is included, the FONSI need not repeat any of the discussion in the assessment but may incorporate by reference.