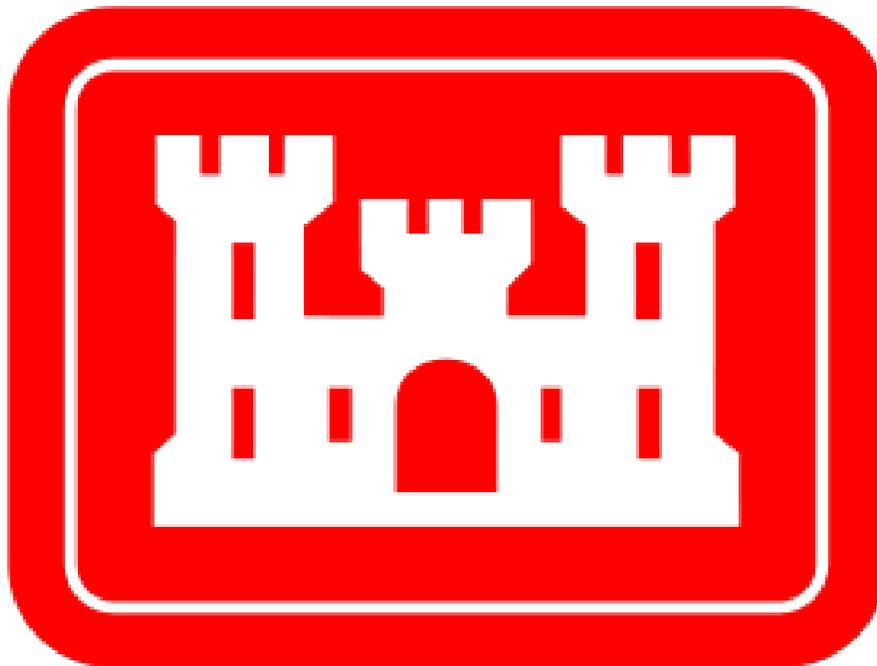




Draft Supplemental Environmental Assessment
Pike County, Kentucky
Levisa Fork Basin
Flood Damage Reduction Project,
Appendix W, Section 202 General Plan



U.S. Army Corps of Engineers
Huntington District
Huntington, West Virginia
July 2020



Supplemental Environmental Assessment
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The brief and concise nature of this document is consistent with the 40 CFR requirements of the National Environmental Policy Act (NEPA) to reduce paperwork and delay by eliminating duplication with existing environmental documentation, incorporating pertinent material by reference, and by emphasizing interagency cooperation.

1.0 INTRODUCTION

1.1 PROJECT BACKGROUND AND AUTHORIZATIONS

The Pike Levisa Flood Damage Reduction Project was created as a result of the April 1977 Flood in the Levisa Fork Basin. The area has been devastated by numerous past floods including the 1929, 1957, 1963, 1964, 1967, 1977, and 1984 floods. Due to millions of dollars in damages and losses from this flood, the Energy and Water Development Appropriations Act of 1981 (Public Law 96-367) and as amended by the Supplemental Appropriations Act of 1982 (Public Law 97-257), subsequent legislation provided authorization for development of flood protection measures for the Levisa and Tug Forks of the Big Sandy River Basin. Section 202 of that legislation directed the Secretary of the Army (acting through the Chief of Engineers) to design and construct flood risk management measures in those areas affected by the 1977 Flood. Nonstructural flood control measures implemented would prevent future losses occurring either from a flood equal in magnitude to the April 1977 flood, or the one percent annual chance flood (also known as the 100 year flood), whichever is greater. A Final Environmental Impact Statement for the Levisa Fork Basin/Haysi Dam Flood Damage Reduction Plan, was completed in 1998.

Pursuant to its Section 202 authority, the U.S. Army Corps of Engineers (Corps) identified and evaluated alternative flood risk management measures in the “Pike County, Kentucky, Section 202 Levisa Fork Basin Flood Damage Reduction Project, Volume 1 Detailed Project Report (DPR), Appendix W, Section 202 General Plan”, dated March 2006. All appropriate levels of review were completed and the Assistant Secretary of the Army for Civil Works approved the DPR in July 2011. Pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., as amended, the Corps prepared an Environmental Impact Statement (EIS) in March 2006, prepared concurrently with the development of the approved DPR,. A Record of Decision was signed in 2011 for the proposed Federal action to implement flood risk management measures along the mainstem of the Levisa Fork in Pike County, Kentucky, including all of the Levisa Fork’s tributaries in the county, to protect against a recurrence of the April 1977 flood.

Due to availability of funding, a Project Partnership Agreement (PPA) was not executed between the Corps and the Non-Federal Sponsor, Pike County Fiscal Court when the DPR was approved in 2011. The DPR approved structural and nonstructural measures including floodwalls at North Pikeville and Coal Run Village; over 2,000 structures eligible for floodproofing or acquisition including seven eligible public facilities; and a ringwall at Millard Middle School Campus. In 2019, the Corps received work plan funding to advance project implementation and ultimately execute a county-wide Project Partnership Agreement (PPA). Following execution of the PPA,



flood risk management measures would be implemented as funding is available therefore, the construction of the measures would most likely occur in phases overtime.

Due to the lapse in time from the approved 2011 DPR and the 2019 work plan funding, as mentioned above, this Supplemental Environmental Assessment (SEA) is being prepared concurrently with an Economic Update to analyze and document limited changes to the human and natural environment in the project area. This SEA is also being prepared pursuant to NEPA, Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508), and Corps implementing regulation, ER 200-2-2.

1.2 PURPOSE, NEED, AND SCOPE

The purpose of the Pike Levisa Project is to implement flood risk management measures to protect residents and properties within the floodplain of the Levisa Fork and its tributaries within Pike County, Kentucky which would be impacted by a reoccurrence of the April 1977 flood. In the absence of flood risk management measures for the project area, residents would be subject to future floods and damage that have occurred in previous years and potential life loss.

This SEA is being prepared by the Corps to identify the most effective, socially acceptable, and environmentally sound project alternative and to determine whether to prepare a Supplemental Environmental Impact Statement (SEIS) or a Finding of No Significant Impact (FONSI). This SEA concisely documents environmental considerations and assists in determining whether significant impacts may be associated with the proposal pursuant to 40 CFR 1508.9(a) and tiers pursuant to 40 CFR 1508.28 to the previous EIS prepared March 2006. The EIS prepared in March 2006 was prepared concurrently with the development of the feasibility study for the Pike Levisa Flood Damage Reduction Project. A Record of Decision was issued for that effort in 2011.

The scope of this SEA is limited to documenting changes to the affected environment within the project area. This document will be tiered from the 2006 EIS and 2011 Record of Decision, as appropriate, and be consistent with NEPA when 1) sufficient design information, and investigations progress on other Project components including relocation of public facilities; and 2) when those components are ripe for consideration.

1.3 PROJECT LOCATION

Pike County is located within the Appalachian Mountains of Eastern Kentucky, in the Levisa Fork watershed of the Big Sandy River. The Russell Fork flows into the Levisa Fork at Millard, Kentucky, downstream from the Corps reservoir at Fishtrap Lake in Kentucky. The Levisa Fork flows into the Big Sandy River, which begins at the confluence of the Levisa Fork and Tug Fork at Louisa, Kentucky.

The project covers all areas within the footprint of the 1977 flood event within the Levisa Fork watershed in Pike County, Kentucky (see Figure 1). This includes the Levisa and Russell Forks, Hurricane Creek, Cowpen Fork, Stonecoal Creek, Buckley Creek, Shelby Creek, Upper Chloe



Creek, Greasy Creek, Slone Branch, Pompey Branch, and Feds Creek. There are 154 miles of streams in the floodplains of these twelve streams.

The study area includes incorporated areas of Pikeville, Coal Run, Elkhorn City, and unincorporated areas in Pike County subject to flood damage from the potential recurrence of flooding similar to that which occurred in April 1977. Also included are floodplain areas located along the tributaries of the Levisa Fork that would be affected by backwater flooding from a recurrence of the April 1977 flood.

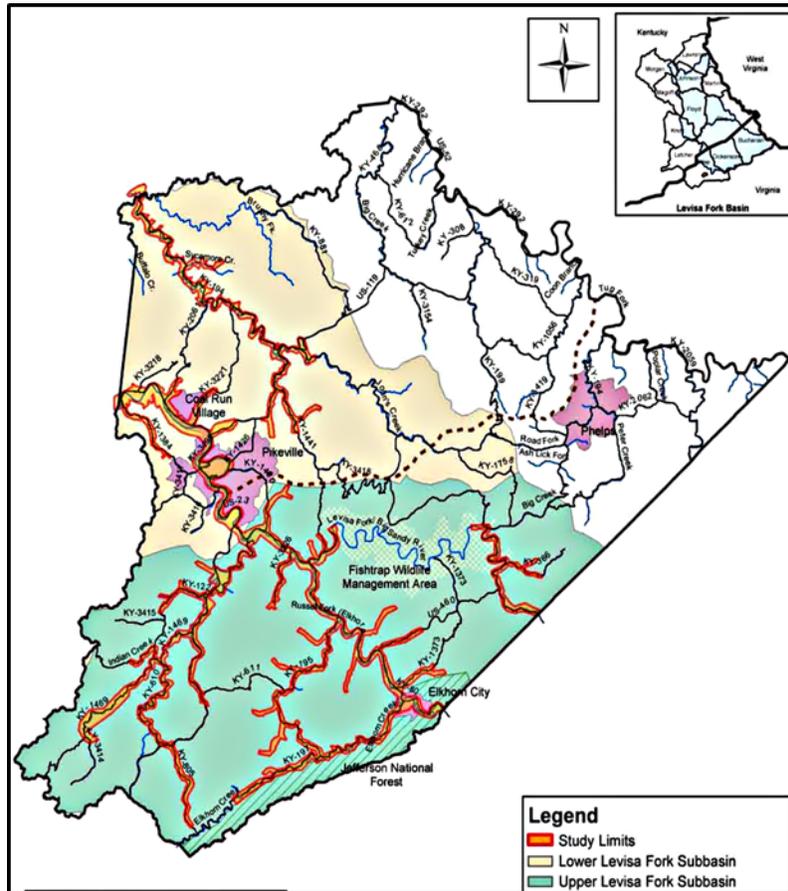


Figure 1: Project Location



2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action Alternative (PAA)

An Economic Update was prepared to evaluate the 2011 approved preferred plan. This evaluation validated that the preferred plan was still the least cost alternative. Therefore, the PAA would entail implementation of structural and nonstructural flood risk management measures as outlined in the DPR. Structural measures include a floodwall at North Pikeville and a levee/floodwall at Coal Run Village and a ringwall around a Millard Middle School Campus. Nonstructural measures include floodproofing or acquisition for approximately 2,000 structures including seven public facilities eligible for relocations, and implementation of an Emergency Evacuation Plan.

Nonstructural project measures include floodproofing, floodplain evacuation, emergency evacuation plan, relocation of public facilities, and strict enforcement of floodplain ordinances. The 2011 approved DPR identified approximately 1,984 eligible structures including: 520 residential acquisition structures, 967 residential floodproofing structures, 443 nonresidential acquisition structures, 28 potential nonresidential floodproofing structures, and 26 public structures potentially eligible for protect in-place. All public facilities as well as commercial and residential structures outside of the structural alignments are voluntary for the non-structural floodproofing or acquisition programs.

The North Pikeville structural measure would consist of a concrete floodwall approximately 4,500 linear feet in length with non-structural measures for structures outside the alignment. This floodwall was designed in the approved 2011 DPR for a level of protection equal to the Standard Project Flood (SPF) and includes reinforced concrete I-Wall and T-Wall segments, a sheetpile retaining wall system behind Pikeville High School, and a gate closure. Since 2006, the Interagency Performance Evaluation Team (IPET) issued recommendations for flood protection, and based on these recommendations any I-wall segments would be converted to T-Wall during design. Additionally, interior drainage control for the floodwall includes a 96,000 gallon per minute (GPM) pump station, with a box culvert for gravity flow during low water river conditions, just downstream of Pikeville High School and an approximate 1.3 acre ponding area. The approved alignment for the floodwall is shown in Figure 2.1.

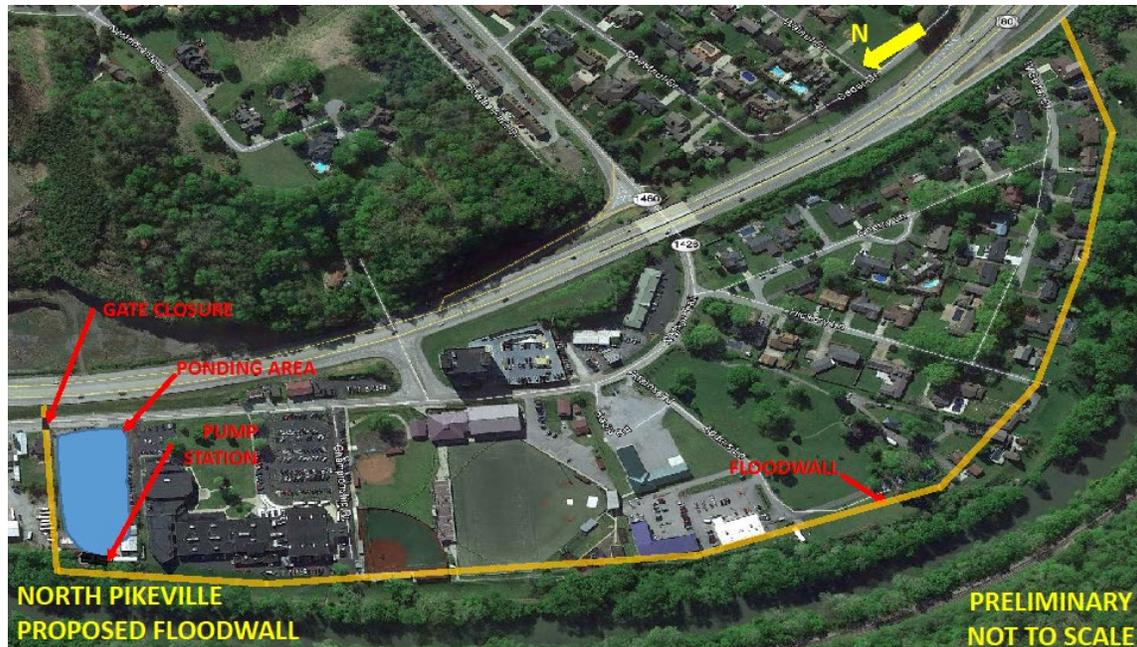


Figure 2.1 – North Pikeville Floodwall Alignment

The Coal Run Village structural measure consists of both a levee approximately 4,200 linear feet in length and a floodwall approximately 1,600 linear feet in length as well as non-structural measures for structures outside the levee and floodwall alignments. This levee and floodwall was designed in the approved 2011 DPR for a level of protection equal to the SPF and includes reinforced concrete I-Wall and T-Wall segments, earthen levee, and two gate closure structures. Per Interagency Performance Evaluation Team Recommendations released after development of the DPR, I-walls would be converted to T-Wall during design. The approved alignment for the floodwall/levee is shown in Figure 2.2. Interior drainage control includes a 93,600 GPM pump station with toe drain lift station and ponding area, approximately 1.8 acres, located at Ratliff Branch.

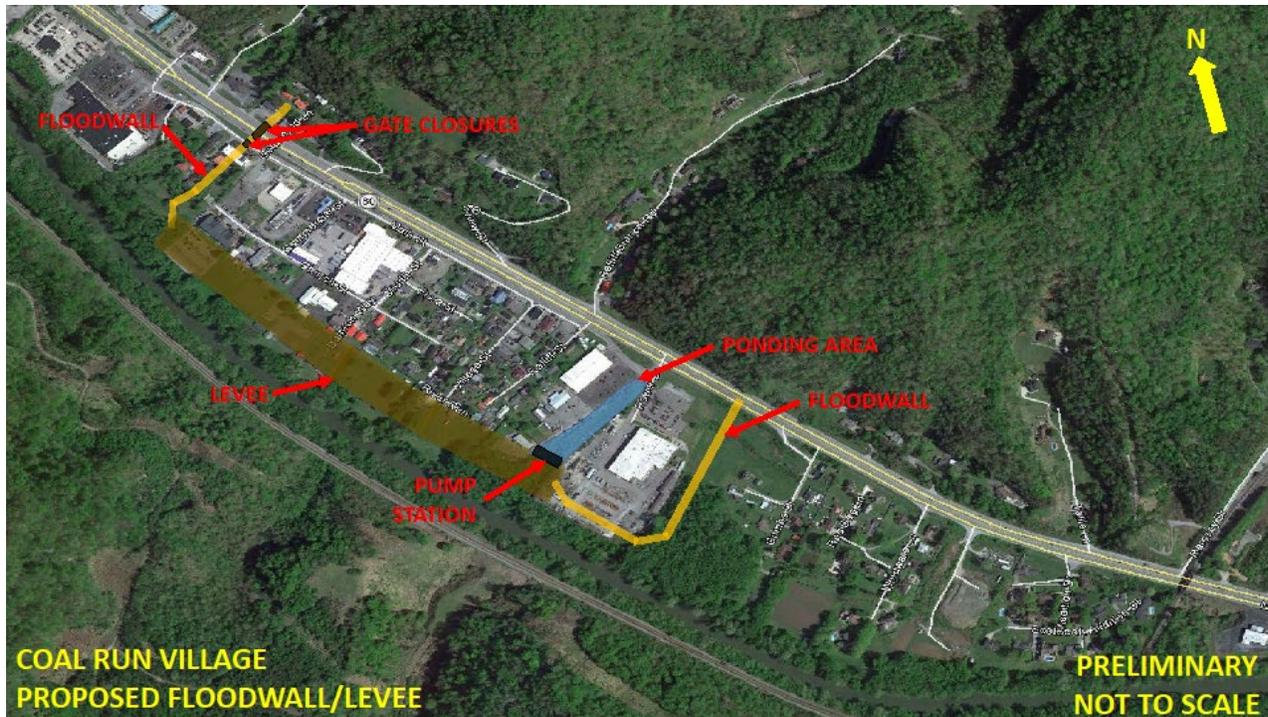
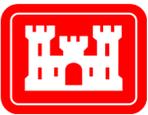


Figure 2.2 – Coal Run Village Floodwall/Levee Alignment

Since approval of the DPR, limited changes have been observed within the footprint of the structural alignment of North Pikeville and Coal Run Village. New development in North Pikeville includes the construction of a pharmacy and medical office, open air farmers market, a multi-tenant retail building, one single family home, and improvements to the Pikeville Mini Park and Pikeville High School athletic facilities. New development in Coal Run Village includes the construction of a multi-office medical center in the northwest, downstream corner of the alignment, Coal Run City Park and improvements to Coal Run Village Church of Christ (church) facilities (installation of a daycare playground area and picnic shelter). The observed changes in North Pikeville and Coal Run Village are located within the structural alignments and would require acquisition.



Figure 2.3 –Update in Structure Inventory for North Pikeville



Figure 2.4 –Update in Structure Inventory for Coal Run Village

The project would utilize local borrow areas as sources of both rock and soil fill. The location, accessibility, and quality of these sources (including assumptions and levels of uncertainty) have not changed significantly from the information provided in the 2011 approved DPR.

Approximately 201,000 cubic yards of random rock fill are required for the levee section of the Coal Run Village floodwall and approximately 36,000 cubic yards would be required along the river bank at North Pikeville adjacent to the Pikeville High School football field. The primary rock borrow area identified in the 2011 approved DPR is an embankment built from rock blasted during road cut construction adjacent to Harmond Branch (Pike County Airport access road). It is assumed with a high level of confidence that the rock fill materials needed for the project would be available at the Harmond Branch site, although processing may be necessary. This rock borrow area is approximately 6.3 miles away from the furthest area of levee construction at Coal Run Village and 8.5 miles from Pikeville High School.

At the time of the DPR there were no homes or businesses immediately adjacent to the Harmond Branch fill site and very few homes or businesses on Harmond Branch itself that would be affected by increased truck traffic. In the fall of 2019, geotechnical staff reviewed aerial imagery



and conducted a site visit to verify site conditions. With the exception of a commercial facility at the southeast corner of Harmond Branch and US 119, no significant changes were observed.

The DPR identified a second rock borrow site on U.S. Route 119, approximately 3.75 miles from the furthest area of levee construction for the Coal Run Village floodwall and approximately 2.7 miles from Pikeville High School. The major disadvantage of the second site is that it would require blasting and excavation of the in-situ rock. These conditions have remained unchanged from the time of the 2011 approved DPR.

Approximately 23,000 cubic yards of clay-rich soil is needed for the impervious core of the levee at Coal Run Village but would not be required for the floodwall at North Pikeville. The soil borrow sites identified in the 2011 DPR are located at Broad Bottom, an area underlain by alluvial sediments, approximately 2.6 miles from the project area. Since the approved 2011 DPR, construction of a newer home (post 2004) has been identified adjacent to Broad Bottom #1 and there have been no observed changes within or adjacent to the Broad Bottom #2 borrow site. Therefore, Broad Bottom #2 is considered the preferred primary soil borrow although Broad Bottom #1 is still being considered as a potential borrow source. Additional exploratory borings would be conducted in PED to help reduce the level of uncertainty as to the extent of suitable material at Broad Bottom #2 and potentially at Broad Bottom #1.

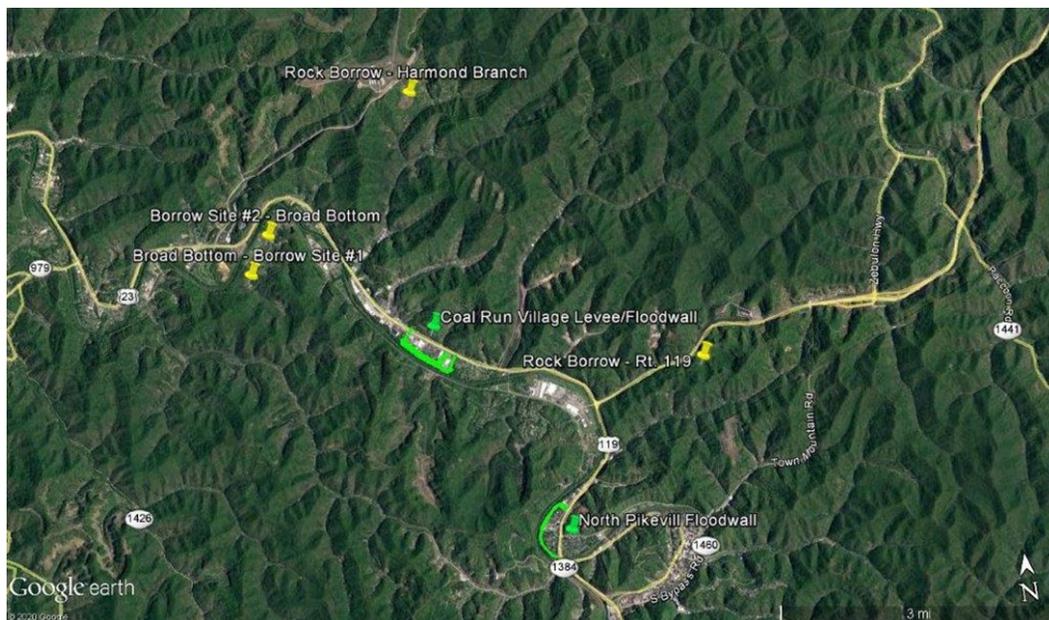


Figure 2.5 – Proposed Rock and Soil Sites



2.2 No Action Alternative (NAA)

The No Federal Action Plan assumes no action by the Federal government to implement any type of comprehensive flood risk management program in the Pike County project area. It reflects continuation of existing economic social, environmental conditions and trends in the project area. The project area will continue to endure frequent floods, economic loss, and potential loss of life. Inherent with this plan would be the continuation of Federally-subsidized flood insurance coverage for property owners that is currently available through the National Flood Insurance Program and the enforcement of local floodplain zoning ordinances. This plan would result in no expenditure of Federal funds to implement a comprehensive flood damage reduction plan in the project area. However, Federal expenditures to subsidize the flood insurance program and to assist in flood recovery operations would continue.

In the absence of the proposed measures for the project area, the potential for future growth and development is limited. It is expected that the residents of the project area would be subjected to future floods and flood damages; similar to those that have occurred in previous years. Flood insurance, now available for floodplain occupants, does provide some economic protection, but would not necessarily guarantee a decent, safe, and sanitary environment.

This alternative was considered unacceptable due to the potential safety hazards resulting from future floods and flood damages. However, it is included in the alternatives analysis to establish a baseline condition for existing human and natural environmental conditions, to allow comparison between future without and with project actions, and to determine potential environmental effects of proposed project alternatives.

3.0 ENVIRONMENTAL SETTING AND CONSEQUENCES

This section discusses the existing conditions by resource category and any potential environmental impacts associated with the No Action Alternative (NAA) as well as with implementation of the Proposed Action Alternative (PAA).

The Corps took context and intensity into consideration in determining potential impact significance, as defined in 40 CFR part 1508.27. The intensity of a potential impact is the impact's severity and includes consideration of beneficial and adverse effects, the level of controversy associated with a project's impacts on human health, whether the action establishes a precedent for future actions with significant effects, the level of uncertainty about project impacts and whether the action threatens to violate federal, state, or local laws established for the protection of the human and natural environment. The severity of an environmental impact is characterized as none/negligible, minor, moderate, significant, or beneficial. The impact may also be short-term or long-term in nature.

- **None/negligible** – No measurable impacts are expected to occur.
- **Minor** – A measurable and adverse effect to a resource. A slight impact that may not be readily obvious and is within accepted levels for permitting, continued resource



sustainability, or human use. Impacts should be avoided and minimized if possible, but should not result in a mitigation requirement.

- **Significant** – A measurable and adverse effect to a resource. A major impact that is readily obvious and is not within accepted levels for permitting, continued resource sustainability, or human use. Adverse impacts likely result in the need for mitigation.
- **Beneficial** – A measurable and positive effect to a resource. May be minor to major, resulting in improved conditions, sustainability, or viability of the resource.
- **Short-Term** – Temporary in nature and does not result in a permanent long-term beneficial or adverse effect to a resource. For example, temporary construction-related effects (such as, an increase in dust, noise, traffic congestion) that no longer occur once construction is complete. May be minor, significant, adverse or beneficial in nature.
- **Long-Term** – Permanent (or for most of the project life) beneficial or adverse effects to a resource. For example, permanent conversion of a wetland to a parking lot. May be minor, significant, adverse or beneficial in nature.

The Corps used quantitative and qualitative analyses, as appropriate, to determine the level of potential impact from proposed alternatives. Based on the results of the analyses, this SEA identifies whether a particular potential impact would be adverse or beneficial, and to what extent. CEQ regulations also require that a proposed action's cumulative impact be addressed as part of a NEPA document. Cumulative impacts are discussed in section 3.19 below.

3.1 ENVIRONMENTAL RESOURCES NOT EVALUATED IN DETAIL

Certain resources areas were eliminated from further analysis in this SEA because they have remained the same and have been adequately addressed in the approved EIS. No further analysis was determined on the following resources: Land Use and Land Cover, Topography and Drainage, Geology and Soils, Air Quality and Climate, Noise, Aquatic Resources, Surface Water Quality and Groundwater, Wildlife and Wetlands, Socioeconomic Resources and Environmental Justice, Hazardous, Toxic, and Radioactive Waste, Health and Safety, Aesthetic Resources, Infrastructure, and Transportation.

Once information is available to assess the effects of the anticipated remaining flood risk management measures such as relocation of public facilities or any change of engineering considerations during design, additional NEPA documentation would be prepared, as necessary.

3.2 FLOODPLAIN MANAGEMENT

Executive Order 11988 requires Federal agencies to consider the potential effects of their proposed actions to floodplains. Since the development of the EIS, the Federal Emergency Management Agency (FEMA) has published updated Flood Insurance Rate Maps (FIRM) for the project area.



Based on review of current FEMA published data, the 100-year flows and elevations are the same today as they were in 2004. Therefore, the 1977 flood still governs for non-structural work. A cursory check for the Standard Project Storm of the watershed upstream of the Pikeville gage, which includes Fishtrap Lake and J.W. Flannagan Lake Projects, and how they would operate during such as storm was performed. The cursory check resulted with peak flows in the vicinity of the two structural projects that were within 10% of the detailed analysis performed when the Engineering Technical Appendix was developed.

The footprints of both the North Pikeville and Coal Run Village structural measures are located within the regulatory floodway. Construction of the two structural measures would require considerable coordination with the Commonwealth of Kentucky and FEMA. The State 401 Water Quality Certification Application includes floodplain development and permit review as part of the application process. A 401 Water Quality Certification Application would be submitted to Kentucky Division of Water (KYDOW) for approval prior to construction. A Conditional Letter of Map Revision (CLOMR) would be submitted to FEMA for review and approval prior to construction and prepared during design. A CLOMR is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the Special Flood Hazard Area (SFHA). The CLOMR does not revise an effective FIRM map, it indicates whether the project, if built as proposed, would be recognized by FEMA. Following construction, the Non-Federal Sponsor would be responsible for preparing and submitting a Letter of Map Revision (LOMR) to FEMA, which revises the effective map. The LOMR allows for official modification to the effective FIRM and results in a physical change to the existing regulatory floodway, effective base flood elevations or the SFHA.

The eight steps associated with the decision making process in EO 11988 were considered in the evaluation of the PAA. See Table 1 below for more detail on how each step was considered. Based on the findings and determination discussed in this report, the selected alternative is in compliance with EO 11988.

Therefore, no significant impacts to floodplains are anticipated to occur from the PAA or NAA.

**Table 1 – Eight Step Decision Making Process**

Determine if a proposed action is in the base floodplain.	Yes, portions of the proposed alternatives are within the regulatory floodplain and SFHA.
Conduct early public review, including public notice.	Early coordination with the public was conducted during preparation of the EIS and this SEA. Recent public meetings were held in March 2020 for which a public notice was issued in advance of each meeting. Additionally, a 30-day public review period will be conducted for this SEA. Also, during the design phase, a public notice would be issued during filing of the KYDOW Floodplain Development Permit.
Identify and evaluate practicable alternatives to locating in the base floodplain, including alternative sites outside of the floodplain.	The purpose of the proposed project is to implement flood risk management measures to reduce flooding impacts and damages for the residences and businesses of Pike County, Kentucky which are affected by a recurrence of the 1977 flood in the Levisa Fork Watershed. The approved EIS evaluated providing flood protection either by carrying out nonstructural measures (floodplain evacuation, flood proofing structures) or a combination of nonstructural and structural measures. The approved 2011 DPR outlined a combination of both nonstructural and structural measures as the PAA. No alternative sites for the structural measures were identified.
Identify impacts of the proposed action.	Based on the current effective FEMA model, the majority of the project is located within the regulatory floodway. Peak flows have been reduced since the 1977 event, therefore the project profiles should be within approved parameters. A HEC-RAS model will be created to show the 100-year, current floodway and with the project. The Corps will submit a CLOMR to FEMA and a Floodplain Development Permit to KYDOW prior to any construction.
If impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate.	The HEC-RAS models will be developed to show any changes to the floodway with the current effective model. Currently, no specific impacts have been identified.
Reevaluate alternatives.	Alternatives were developed during formulation of the DPR and all environmental impacts were considered and the impacts are considered minimal in the EIS and in this SEA.



Present the findings and a public explanation.	The public has been involved throughout the development of the project throughout the years. Also, our direct coordination with the local Floodplain Coordinator, FEMA, and KYDOW has been conducted.
Implement the action.	Implementation is dependent upon execution of the Project Partnership Agreement (estimated 2021) and allocation of funding.

3.3 TERRESTRIAL RESOURCES

Pike County lies within the Central Appalachian Ecoregion, specifically the Dissected Appalachian Plateau Ecoregion, which is composed of narrow ridges, deep coves, and narrow valleys. The majority of land cover in Pike County is forest (Woods et al. 2002).

Mixed mesophytic forest is the normal climax vegetation type in this region; however, forest communities may vary in species composition based on topography, elevation, slope, aspect, soils, and other variables. Common tree species of mixed mesophytic forests include oaks (*Quercus* sp.), hickories (*Carya* sp.), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), yellow poplar (*Liriodendron tulipifera*), beech (*Fagus americana*), black cherry (*Prunus serotina*), black walnut (*Juglans nigra*), Eastern hemlock (*Tsuga canadensis*), shagbark hickory (*Caraya Ovata*) and many others (Woods et al. 2002).

Riparian forests, which are located adjacent to rivers (e.g., Levisa Fork), are often composed of the following species: box elder (*Acer negundo*), silver maple (*Acer saccharinum*), yellow buckeye (*Aesculus octandra*), river birch (*Betula nigra*), American beech (*Fagus grandifolia*), green ash (*Fraxinus pennsylvanica*), sycamore (*Platanus occidentalis*), black willow (*Salix nigra*), and slippery elm (*Ulmus rubra*). Shrubs and vines of riparian forest habitats include brookside alder (*Alnus serrulata*), crossvine (*Bignonia capreolata*), elderberry (*Sambucus canadensis*), wild hydrangea (*Hydrangea arborescens*), privet (*Ligustum vulgare*), spicebush (*Lindera benzoin*), pawpaw (*Asimina triloba*), ironwood (*Carpinus caroliniana*), and poison ivy (*Toxicodendron radicans*). Common herbaceous species include giant ragweed (*Ambrosia trifida*), orange jewelweed (*Impatiens capensis*), yellow jewelweed (*Impatiens pallida*), water willow (*Justicia americana*), etc. (Eco-Tech, 2003).

Land cover within the Coal Run Village and North Pikeville project area was identified in the EIS as consisting of riparian forest, upland mixed forest, scrub/shrub upland, old field, emergent wetlands, cleared/bare ground, kudzu, and developed areas. The EIS identified the riparian forest in the project area as low to medium quality with little understory dominated by only a few species including box elder, silver maple, yellow poplar, and sycamore. Riparian areas further from the river had a greater diversity of trees, shrubs, and herbaceous vegetation.



Direct short term and long-term impacts to terrestrial resources were identified in the EIS for the construction of the North Pikeville and Coal Run Village structural measures. The EIS referenced clearing of approximately 1.9 acres of bottomland forest, 3.2 acres of old field vegetation, and 3.0 acres of scrub/shrub upland vegetation for North Pikeville. Impacts from Coal Run Village structural measures were anticipated as approximately 10.1 acres of bottomland forest and 2.0 acres of scrub/shrub upland.

In the approved EIS, the proposed soil borrow area, Broad Bottom #1, which is approximately seven acres, was described as predominantly old field and scrub/shrub vegetation with relatively low quality of existing habitat. The second soil borrow area identified, Broad Bottom #2, which is approximately nine acres, consisted of a previously cleared area with the exception of a few trees.

Two potential rock borrow areas were identified in the EIS, Rock Borrow Area #1 (Harmond Branch) and Rock Borrow Area #2 (U.S. Route 119). At the time of the EIS, Rock Borrow Area #1, which is approximately 14 acres, had been disturbed due to blasting efforts for construction of the adjacent airport and consisted of limited vegetation and low flora diversity. Impacts from further disturbance would not be significant with respect to vegetation or habitat. Rock Borrow Area #2, which is approximately 6.1 acres, consists of upland forest habitat. Use of this borrow area would remove this vegetation and result in the loss of forest habitat. In the EIS, Rock Borrow Area #1 was identified as the preferred borrow site.

No direct adverse impacts were identified in the EIS to nonstructural area terrestrial resources. Minor disturbances to terrestrial resources in the immediate vicinity of existing structures could occur but would not be significant.

To address impacts, terrestrial mitigation measures were identified in the EIS and include reforestation of approximately 10.4 acres of riparian and bottomland forest habitat, preservation of approximately 3.8 acres of existing riparian and bottomland forest habitat, development and implementation of an Invasive Species Management Plan, and a Terrestrial Mitigation Monitoring Plan.

Due to optimization in the levee and floodwall alignments and development since the EIS, it is anticipated that amount of tree clearing identified in the EIS would be reduced. Within North Pikeville new development includes the construction of a pharmacy, medical office, open air farmers market, a multi-tenant retail building, one single family home, and improvements to the Pikeville Mini Park and Pikeville High School athletic facilities. Minor changes in terrestrial habitat have occurred including clearing of riparian habitat immediately adjacent to the Pikeville High School along the riverbank. Additionally, construction of the multi-tenant retail building and medical office cleared vegetation and converted land use from old field to developed land (See Figures 3.1 & 3.2). It is anticipated that there would be approximately 3.5 acres or less of tree clearing within the North Pikeville project area.



Figure 3.1 – North Pikeville 2008

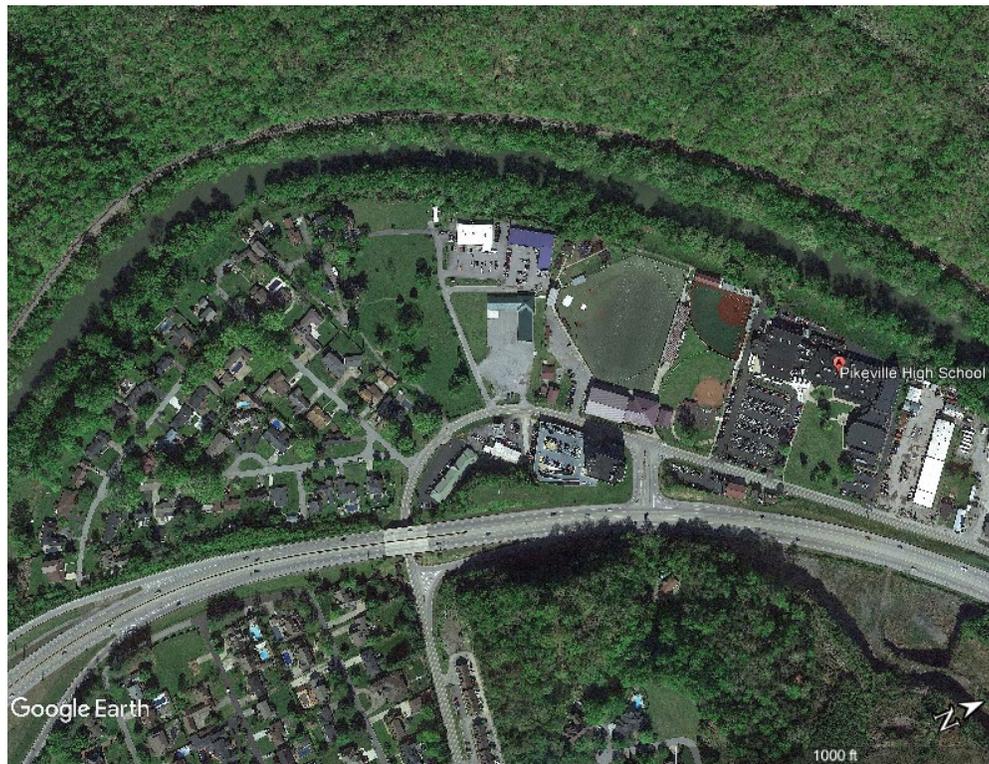


Figure 3.2 – North Pikeville 2019



Figure 3.3 – Current terrestrial vegetation along the riverbank in North Pikeville

New development in Coal Run Village includes the construction of a multi-office medical center in the northwest, downstream corner of the alignment. Additionally changes include construction of the Coal Run City Park and improvements to Church facilities (installation of a daycare playground area and picnic shelter). Half of the terrestrial habitat adjacent to American Electric Power facility has been cleared for residential use, this area was originally identified in the EIS as including a higher diversity of terrestrial species. Due to the new developments, impacts to terrestrial resources would be reduced from those identified in the EIS (See Figures 3.4 & Figure 3.5). It is anticipated that there would be approximately seven acres or less of tree clearing within the Coal Run Village project area.



Figure 3.4-Coal Run Village 2004



Figure 3.5 – Coal Run Village 2019



Figure 3.6 – Current terrestrial vegetation along the riverbank in Coal Run Village



The proposed soil borrow area, Broad Bottom #1, has been developed for residential use since the development of the EIS. Since the approved EIS, construction of a newer home has been identified in the Broad Bottom #1 soil borrow area. There have been no observed changes within or adjacent to the Broad Bottom #2 borrow site and remains largely un-vegetated therefore, is the preferred borrow site. Additionally, out of the two potential rock borrow areas identified in the EIS, Rock Borrow Area #1 has been identified as the preferred rock borrow site. This site is an embankment built from rock blasted during road cut construction adjacent to Harmond Branch (Pike County Airport access road). This site has several additional benefits: haul road access; material has already been blasted; the site has ample area for stockpiling and processing, if needed; and remains largely un-vegetated from previous disturbance.

Detailed tree clearing limits would be developed during the Pre-Construction, Engineering, and Design Phase. Reforestation and preservation mitigation measures identified in the EIS and listed above, have been updated based on the optimization of the levee and floodwall alignments and resource agency approved mitigation opportunities. Through coordination with the U.S. Fish and Wildlife Service (USFWS), it has been determined that any and all tree clearing impacts would be mitigated by contributing to the Imperiled Bat Conservation Fund through an agreement. The Invasive Species Management Plan would still be required for mitigation efforts. Due to decreased impacts and mitigation measures, there would be no significant adverse impacts as a result of the PAA.

Under the NAA, there would be no direct changes in land use in the implementation area. However, human encroachment of riparian areas adjacent to Levisa Fork would likely continue, along with associated loss of habitat.

3.4 THREATENED AND ENDANGERED SPECIES

Consultation with the USFWS was completed under Section 7 of the Endangered Species Act and a Final Fish and Wildlife Coordination Act Report was completed on 7 July 2005. Since the development of the EIS, new species have been listed under the Endangered Species Act for Pike County, Kentucky. The new Federally listed species are the Grey Bat, Northern Long-eared Bat, and Big Sandy Crayfish. Tree clearing would be required for project implementation and may occur outside the seasonal tree clearing window. However, the seasonal tree clearing window of October 15 to March 31 is the preferred course of action. Therefore, the Corps Huntington District has determined the proposed action may affect and is likely to adversely affect the Indiana bat and Northern Long-Eared bat. To mitigate for the impacts, the Corps proposes to utilize the Imperiled Bat Conservation Fund (IBCF) through a contribution to the Kentucky Natural Lands Trust as agreed upon with USFWS. Consultation is ongoing with USFWS and it is anticipated that this adverse action would be analyzed under the 2015 Biological Opinion: Kentucky Field Office's Participation in Conservation Memoranda of Agreement for the Indiana Bat and/or Northern Long-eared Bat (BO).



Coordination with USFWS determined there were no historic records of the Big Sandy Crayfish within the project. Based on this information, the Corps has determined the project may affect but is not likely to adversely affect the Big Sandy Crayfish. Prior to issuance of a Finding of No Significant Impact, coordination under Section 7 of the Endangered Species Act and updates to the Fish and Wildlife Coordination Act Report will be completed.

Implementation of the No Federal Action Alternative would have no direct impact on threatened and endangered species. However, continued encroachment of humans on riparian habitats adjacent to Levisa Fork could negatively impact habitat for special status species, including the Indiana bat and Northern Long-eared bat.

3.5 CULTURAL RESOURCES

In March 2003, a Programmatic Agreement was developed between the Corps and KYSHPO for Section 202 activities within the Levisa Fork Basin in Pike, Johnson, Lawrence, and Floyd Counties, Kentucky. The Programmatic Agreement expired in 2008. Since the expiration of the Programmatic Agreement, a new project specific agreement is being developed between the Corps and KYSHPO to provide a means of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA). The new Programmatic Agreement is anticipated to be signed in August 2020, prior to issuance of a Finding of No Significant Impact to fulfill obligations under Section 106. The draft PA is located in Appendix B.

Compliance with the NHPA is necessary for NEPA documentation to be finalized. Pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800.3), the District is seeking project related input from the Kentucky State Historic Preservation Office (KYSHPO), federally recognized Tribes, and other Consulting Parties. The District is drafting a Programmatic Agreement (PA) to ensure compliance with Section 106 of the National Historic Preservation Act (NHPA), and consultation is currently ongoing. The District is anticipating conducting identification efforts and effects determinations during the Pre- Construction Engineering and Design (PED) Phase, and that historic properties may be affected due to the extent of the Project. The PA is anticipated to be executed in August 2020. During PED, the project will undergo NHPA Section 106 review and any potential historic properties identified will require evaluation to establish their eligibility for listing on the National Register of Historic Places (NRHP). Proposed mitigation for impacts to NRHP eligible properties will require consultation, and a Memorandum of Agreement (MOA) may have to be executed in support of the PA.

3.6 RECREATION

Recreational mitigation outlined in the EIS included relocation of the existing North Pikeville Park (Pikeville Mini Park) adjacent to the athletic fields, coordination with the Coal Run Village Church of Christ regarding access to recreation areas, creating a flat top on the levee at Coal Run Village to allow for future recreation use, and continued coordination with Millard Elementary School to determine whether the ringwall design can accommodate additional land for replacement recreational area.



Since the development of the DPR there has been construction of the Coal Run City Park and upgrades to the Pikeville Mini Park and Pikeville High School athletic facilities. The Coal Run City Park includes a walking path with a covered bridge, small amphitheater, playground and swing set, restroom facility, picnic shelter, and parking. Community events are held at the Coal Run City Park including the Old Fashioned Independence Day celebration.



Figure 3.7- Coal Run City Park

Direct impacts to recreation would occur from project implementation as these facilities are within the alignment of the structural measures. Recreation mitigation requirements would be carried out as identified in the EIS. Limited changes in the project area such as the addition of the Coal Run City Park could require additional mitigation similar to recreation commitments in the EIS. Changes to the direct impacts would have to be addressed prior to implementation through coordination efforts. Coordination is ongoing and mitigation recommendations for Coal Run City Park will be updated in the SEA prior to issuance of a FONSI.

3.8 CUMULATIVE EFFECTS

The Corps must consider the cumulative effects of the proposed project on the environment as stipulated by NEPA. Per 40 CFR Part 1508.7 Council on Environmental Quality [CEQ] Regulations, cumulative effects are the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or Non-Federal) or person undertakes such



actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The cumulative effects analysis is based on the potential effects of the proposed project when added to similar impacts from other projects in the region. An inherent part of the cumulative effects analysis is the uncertainty surrounding actions that have not yet been fully developed. The CEQ regulations provide for the inclusion of uncertainties in the analysis and states that "when an agency is evaluating reasonably foreseeable significant adverse effects on the human environment...and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking" (40 CFR 1502.22).

Temporal and geographical limits for this Project must be established in order to frame the analysis. These limits can vary by the resources that are affected. The temporal limits for assessment of this impact would initiate in 1981 with the passage of the Section 202 of the Energy and Water Development Appropriations Act and end 50 years after completion of this project. The geographical extent would be broadened to consider effects beyond the Proposed Action Alternative and is considered to be the Levisa Watershed.

The Levisa Watershed is listed in the Environmental Protection Agency's Waterbody Quality Assessment Report where it is listed as impaired for pathogens, metals, nutrients, organic enrichment/oxygen depletion, sediment, salinity, total dissolved solids, and turbidity. In the past, flood risk management measures, similar to those proposed project, have occurred or ongoing in other communities in the Levisa Fork Basin. These measures include nonstructural measures in Dickenson County, Virginia, Buchanan County, Virginia, and the Town of Martin, Kentucky. These past actions had similar temporary impacts but no significant cumulative impact. Long-term beneficial impacts on the floodplain as a result of these past actions have been realized. The Lower Levisa Watershed is part of the Big Sandy River Basin. Watershed studies for the Big Sandy River Basin have been undertaken recently by both the Corps and the U.S. Department of Agriculture (USDA), but currently, no watershed programs are active in the Big Sandy Watershed. The Big Sandy Area Development District (BSADD) is a regional planning organization that serves Floyd, Johnson, Magoffin, Martin, and Pike Counties. BSADD performs services in water management and has a water management council that meets to discuss existing projects and needs within the service area. In the future, watershed programs may address obstruction to stream flow and other maintenance activities. Impairment of the Levisa Watershed is expected to continue. Additionally, implementation of similar flood risk management including but not limited to measures in Buchanan County, Virginia, Floyd County, Kentucky, and Johnson County, Kentucky could occur.

Section 3.0 documents the environmental effects of the Proposed Action Alternative and No Action Alternative with respect to existing conditions and focus on resources that have changed since the approved EIS. As discussed above, these changes include:

- New effective FEMA Flood Insurance Rate Map
- Newly listed Threatened and Endangered Species and compliance with Section 7 of the Endangered Species Act and the Fish and Wildlife Coordination Act
- Optimization of Levee/Floodwall Alignment/reduced footprint



- Reduced tree clearing (especially bottomland hardwood areas)
- Compliance with Section 106 of National Historic Preservation Act through execution of a new Programmatic Agreement
- Construction of new recreational facilities for which any adverse impacts would be mitigated prior to implementation

These effects of these limited changes are not considered significant. Adverse impacts to resources that have remained the same were previously adequately addressed in the approved EIS. Past actions that may have resulted in similar effects include nonstructural and structural actions in the Levisa Fork Watershed. These impacts would be moderate and temporary. Through implementation of flood risk management measures in the watershed, long-term beneficial impact on the floodplain and on riparian habitats within the basin. By removing structures and human activity from the floodplain, more flood storage is created and the riparian corridor may be re-established. In the future, implementation of flood risk management measures in the project area and watershed would be constructed.

The availability of Federal funds through the 202 Program is an additional benefit to assist an area that has in the past received numerous flooding and damages. Given the current program is in place for the foreseeable future and the overall beneficial effect from implementation of the Proposed Action, there is expected to be a positive cumulative effect in the project area based on past, present, and reasonably foreseeable actions.

5.0 STATUS OF ENVIRONMENTAL COMPLIANCE

The Proposed Action will be in full compliance with all local, state, and Federal statutes as well as Executive Orders prior to issuance of a FONSI. Compliance is documented below in Table 3.

Statute/Executive Order	Full	Partial	N/A
National Environmental Policy Act (considered partial until the FONSI is signed)*		X	
Fish and Wildlife Coordination Act		X	
Endangered Species Act		X	
Clean Water Act	X		
Wild and Scenic Rivers Act	X		
Clean Air Act	X		
National Historic Preservation Act		X	
Archeological Resources Protection Act			N/A
Comprehensive, Environmental Response, Compensation and Liability Act	X		
Resource Conservation and Recovery Act	X		
Toxic Substances Control Act	X		
Quiet Communities Act	X		
Farmland Protection Act	X		
Executive Order 11988 Floodplain Management		X	
Executive Order 11990 Protection of Wetlands	X		
Executive Order 12898 Environmental Justice in Minority	X		



Table 2 - Environmental Compliance Status			
Populations and Low-Income Populations			
Executive Order 13045 Protection of Children	X		

6.0 AGENCY AND PUBLIC REVIEW

Coordination with Federal, state, and local agencies and public officials is on-going through development of the SEA. Meetings were held with the City of Pikeville and the Village of Coal Run on 3 February 2020 to update the local officials on project status. On-site project scoping meetings were conducted on 21 February 2020 with representatives of the USFWS and on 6 March 2020 with representatives from the KYDOW. A teleconference was held with the KYSHPO on 26 May 2020 to facilitate coordination on a draft Programmatic Agreement.

Two public meetings were held in order to provide the public information on this validation effort, development of the SEA, and identification of interested consulting parties for the Programmatic Agreement. The meetings were held at the Breaks Interstate Park on 10 March 2020 and at the Pikeville Public Library on 12 March 2020. Approximately ten persons attended the Breaks Interstate Park meeting and over 50 persons attended the Pikeville Public Library meeting. The majority of comments received during the meetings focused on continued coordination, creation of a project website, and updated mapping.

The draft SEA and FONSI will be made available for agency and public review and comment for a period of 30 days, as required under NEPA. A Notice of Availability will be published in the local newspaper, the Appalachian News-Express, advising the public of this document's availability for review and comment. A copy of the draft SEA will also be placed in the Pike County Public Library and will be made available on-line at:

<http://www.lrh.Corps.army.mil/Missions/PublicReview.aspx>.

The mailing list for the SEA will be located in Attachment A.

7.0 CONCLUSION

The proposed project would provide protection to residents within the project area from a recurrence of the 1977 flood. No significant changes from the approved EIS have been identified. Limited changes could result in minor impacts which would be mitigated through measures outlined in this SEA and would not have a significant effect on the quality of the natural and human environment. Therefore would not require preparation of an Environmental Impact Statement. A draft FONSI accompanies this SEA.

8.0 LIST OF INFORMATION PROVIDERS AND PREPARERS

U.S. Army Corps of Engineers Huntington District
Planning Branch



502 Eighth Street
Huntington, WV 25701

9.0 REFERENCES

Additional references can be found in Chapter 6 of the EIS.

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