



Draft Environmental Assessment
Section 531
Hollybush KY 645 Water and Sewer Extension Project
Martin County, Kentucky



U.S. Army Corps of Engineers
Huntington District
Huntington, West Virginia
November 2017



Draft Environmental Assessment
Section 531 Hollybush KY 645 Water and Sewer Extension Project
Martin County, Kentucky
Executive Summary

The Martin County Fiscal Court is proposing to provide water and sanitary sewer service to the previously unserved area known as the Hollybush Industrial Development area. The Martin County Board of Education has started construction of a new high school building in the Hollybush area. The water and sanitary sewer extension would provide utility service for the new high school building.

The Proposed Action Alternative would entail construction and installation of water and sewer lines, pump station, and water storage tank. The sanitary sewer extension will tie into an existing sewage pump station and includes approximately 5,400 LF of 6" PVC force main and a duplex grinder pump station. Also included, will be two service connections, highway bore for the 6" force main and a connection to an existing sewage pump station located near the intersection of KY 40 and KY 645. The water service extension includes approximately 5,500 linear feet of 8" water main, a booster pumping station and an approximate 150,000 gallon water storage tank, service connections, highway bore for the 8" water main, and fire hydrant assemblies. Water and sewer lines would be installed utilizing an open cut trench. The depth of the trench would vary throughout the project to accommodate the changes in elevation and slope. After construction, the displaced soils would be backfilled and restored to preexisting conditions. The sites for the pump stations and storage tank will be permanently converted to utility space.

The proposed project is a partnership agreement between the Martin County Fiscal Court and the US Army Corps of Engineers (Corps), established under the authority of Section 531 of the Water Resources Development Act of 1996 (Public Law No. 104- 303), as amended. The Section 531 program provides design and construction assistance for water related environmental infrastructure projects to Non-Federal interests in southern and eastern Kentucky. Under this program the Corps may provide support in the form of design and construction assistance for water-related environmental infrastructure, water resource protection and development, and environmental restoration. Examples of possible projects that would qualify under this program could include wastewater treatment and related facilities, water supply, water storage, water treatment, water distribution facilities, and surface water resource protection and development. Funding, as established under Section 531, shall be shared 75% Federal and 25% Non-Federal (State and Local). This Environmental Assessment is prepared pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality Regulations (40 CFR 1500-1508), and Corps implementing regulation, ER 200-2-2.

The Environmental Assessment has concluded there are no significant impacts to the human environment associated with the implementation of the proposed Hollybush KY 645 Water and Sewer Extension Project



SECTION 531
HOLLYBUSH KY 645 WATER AND SEWER EXTENSION PROJECT
MARTIN COUNTY, KENTUCKY
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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. The majority of data collection and analysis in this document was performed by Kentucky Engineering Group, PLLC in conjunction with the U.S. Army Corps of Engineers (Corps).

1.0 PROJECT DESCRIPTION

1.1 Project Background

This Environmental Assessment (EA) examines the potential environmental impacts of the utilities project as proposed by the Martin County Fiscal Court. The purpose of the EA is to analyze the potential environmental impacts of the proposed project and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 Purpose, Need, and Authorization

The purpose of the proposed project is to provide water and sanitary sewer service to the previously unserved area known as the Hollybush Industrial Development area. The Martin County Board of Education has started construction of a new high school building in the Hollybush area. The need for the water and sanitary sewer service in the proposed area is to provide utility service for the new high school building.

The proposed project is a partnership agreement between the Martin County Fiscal Court and the Corps established under the authority of Section 531 of the Water Resources Development Act (WRDA) of 1996 (Public Law No. 104- 303), as amended, which provides authority for the Corps to establish a program to provide environmental assistance to Non-Federal interests in southern and eastern Kentucky. This law provides design and construction assistance for water related environmental infrastructure projects to Non-Federal interests in southern and eastern Kentucky, including projects for wastewater treatment and related facilities, water supply, water storage, water treatment, water distribution facilities, and surface water resource protection and development.

This EA is prepared pursuant to NEPA, Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508), and Corps implementing regulation, ER 200-2-2.

2.0 ALTERNATIVES DISMISSED FROM FURTHER CONSIDERATION

2.1 8" Gravity Sewer Connection

This alternative considered constructing a conventional 8" gravity sewer located along the new KY 645 from the school site to an existing pump station at the intersection of KY 40 and KY



645. This alternative was dismissed from further consideration as the cost is approximately two times the cost of the preferred alternative, making this alternative a non-viable option.

2.2 Extended Aeration Wastewater Treatment Plant Connection

This alternative considered installing a package extended aerations wastewater treatment plant at the site for treatment of wastewater. However, there is no suitable discharge point for this type of plant. Therefore, this alternative is not technically feasible and was dismissed from further consideration.

2.3 KY 40 Water Service Connection

This alternative considered connecting to an existing 10" water main located along KY 40 to the south of the proposed site. This water main is already over capacity and connecting a new main and pump station to this water main would increase already existing capacity problems in the area. Therefore, this alternative is not technically feasible and was dismissed from further consideration.

2.4 Utilize Existing Water Storage Tank

This alternative considered utilizing an existing water storage tank located on KY 40. The connection and pumping station would need to be connected to the same KY 40 water main that currently has capacity problems. Also, the existing water storage tank is not at the proper elevation to provide adequate pressure to the school without installing an additional pumping station, which was cost prohibitive. Therefore, this alternative was dismissed from further consideration due to greater costs than the proposed action and is not technically feasible.

3.0 PROPOSED ACTION AND ALTERNATIVES

3.1 Proposed Action Alternative (PAA)

The PAA will provide water and sewer service to the new Martin County High School building. The sanitary sewer extension will run from the site South along KY 645 to the intersection of KY 645 and KY 40 where it will tie into an existing sewage pump station and includes approximately 5,400 LF of 6" PVC force main and a duplex grinder pump station. Also included, will be two service connections, highway bore for the 6" force main and a connection to an existing sewage pump station located near the intersection of KY 40 and KY 645.

The water service extension to serve the school will generally run North West from the site over to KY 908 and connect to an existing water main near Martin County Water District's water treatment plant and include approximately 5,500 LF of 8" water main, a booster pumping station and an approximate 150,000 gallon water storage tank. Also included will be a connection to an existing water main, at least, four fire hydrant assemblies, two service connections and a highway bore for the 8" water main. Water and sewer lines would be installed utilizing an open cut trench. The depth of the trench would vary throughout the project to accommodate the



changes in elevation and slope. After construction, the displaced soils would be backfilled and restored to preexisting conditions. The sites for the pump stations and storage tank would be permanently converted to utility space.

3.2 No Action Alternative (NAA)

Under the NAA, the Corps would not provide funding for the project. Additionally, Martin County would not expand water and sewer lines and the new school under construction would not have access to water and sewer service. Therefore, this alternative was considered unacceptable due to unavailability of water or sewer service.

4.0 ENVIRONMENTAL SETTING AND CONSEQUENCES

4.1 Location

The affected area is located within Martin County, Kentucky. The site of the new Martin County High School is located east of the town of Inez beside the newly extended KY 645. The water line will extend from the Martin County Utility District's water treatment plant on KY 908 to the high school site. The sewer lines will run from the high school site to the existing sewer line along KY 645/Route 40 intersection. Project location mapping can be found in Appendix A.

4.2 Land Use

Land use in the vicinity of the PAA is rural. The majority of the water line route to the school site would be through undeveloped wooded hillside utilizing existing gas well access roads. The route of the waterline starts at the water treatment plant and passes a small number of residences before traversing previously disturbed existing access roads through the undeveloped wooded hillside. The route of the sewer line would start at the school site with the pump stations and run within road right-of-ways along the newly extended Route 645. There is no development along this route until the sewer line reaches the intersection of Route 645 and Route 40 where there are a number of businesses and a technical school. The location of the water storage tank is rural and was timbered prior to the sponsor purchasing land for the proposed project. The creation of developable land from the extension of Route 645 could lead to changes in land use in the future and could have desirable community growth. However, at this time, due to the economic conditions in Martin County, future land use changes are not expected to occur. After water and sewer line installation, existing conditions would be re-established. Therefore, there would be no anticipated impacts to land use as part of the PAA.

There would be no impacts to land use as a result of NAA.

4.3 Climate

The Tug Watershed's mid-latitude position makes it susceptible to highly variable weather throughout the year. The watershed's climate is greatly influenced by oceanic and atmospheric interactions. The watershed experiences seasonal weather patterns throughout the year, with



climatic conditions typical of summer, fall, winter, and spring seasons for the Mid-Atlantic and Southeast Regions of the United States. Variability in weather tends to be greater during the late winter, spring, and fall seasons within the watershed. Summers are usually characterized by warm to hot weather with periods of high humidity. Winters within the watershed are typically mild, with areas at higher elevations experiencing slightly harsher winters and greater snowfall. Fall is typically the driest season within the watershed, while spring is typically the wettest.

The PAA would not involve any activity that could affect the environment in regard to climate change. This region is not projected to experience severe drought conditions and is instead expected to experience more precipitation in the future as larger and more intense rainfalls become more frequent. As a result, the PAA would not likely be influenced by or influence future climate change. For the same reasons, there are also no impacts expected with respect to climate as a result of the NAA.

4.4 Terrestrial Habitat

The PAA would be constructed primarily on previously disturbed areas, including existing access roads and road right-of-ways; therefore, potential impacts to vegetation would be minimal and temporary. No tree clearing is anticipated for the proposed project as most of the water and sewer line routes have been previously disturbed due to prior road construction. Water line and sewer line areas would be returned to pre-construction conditions upon completion of construction activities. The water tank site was cleared prior to the Fiscal Court negotiating the property and there are no plans with the proposed project to clear any additional areas. Only short-term temporary impacts during construction are anticipated to occur. Therefore, no significant long-term impacts to terrestrial habitat are anticipated as part of the PAA.

As the selection of the NAA would entail no changes to the project area, there are no impacts to terrestrial habitat anticipated as part of the NAA.

4.5 Floodplains

Executive Order 11988 requires Federal agencies to consider the potential effects of their proposed actions to floodplains. In order to determine the PAA's potential floodplain impact, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were reviewed and portions of the proposed project are located within the base floodplain or the area that has a 1-percent chance or greater of having a flood in any given year (<https://www.fema.gov/floodplain-management/flood-zones>). The proposed water and sewer lines with the exception of the storage tank and pump system would be buried and result in no change in grade or elevation. The water storage tank location and pump station would be constructed outside of the floodplain. Prior to construction, any appropriate permits will be obtained.

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



4.6 Prime and Unique Farmland

The Farmland Protection Policy Act (FPPA) requires Federal agencies to minimize the conversion of prime and unique farmland to non-agricultural uses. The majority of the project occurs in previously disturbed areas (i.e. existing access roads). Based upon review of the project, the Natural Resource Conservation Service (NRCS) determined that since soils in the project area are not classified as prime farmlands or statewide important farmlands, the FPPA would not apply to this proposed project.

Based upon the NRCS determination, a Farmland Conversion Impact Rating does not need to be completed and the PAA would have no impact on Prime or Unique, Statewide, or Locally important farmland (Appendix B).

There are no impacts to Prime and Unique Farmland anticipated as part of the NAA.

4.7 Aquatic Habitat/Water Quality

The proposed project area is located within the Tug Watershed. Several waterbodies within the watershed are listed in the Environmental Protection Agency's Waterbody Quality Assessment Report. The major sources of impairment in Coldwater Creek is sediment and salinity. Rockcastle Creek's cause of impairment is pathogens, sediment, salinity, and turbidity. Additionally, Tug Fork River's cause of impairment is Polychlorinated Biphenyls (PCBs). Implementation of the PAA would not result in any new discharge of pollutants. Construction of the PAA will avoid any permanent and temporary in-stream impacts as stream crossings along Coldwater Creek will be directionally bored beneath waters. Impacts to groundwater could occur from the proposed directional boring, however, these impacts would be temporary and minor. Under the Clean Water Act, a 404 (b)(1) analysis or 401 permit is not needed for this action since fill material will not be discharged into waters of the U.S.. However, a National Pollutant Discharge Elimination System (NPDES) permit will be required due to the size of construction area. Best Management Practices (BMPs) would be used throughout the project to prevent runoff from the project into adjacent surface waters. There would be no significant impact on downstream users as a result of the proposed action. Based on the above, implementation of the PAA would not result in significant short or long term environmental impacts to aquatic habitat and water quality.

Under the NAA, no aquatic impacts would occur and water quality in the project area would remain unchanged.

4.8 Wetlands

National Wetland Inventory Maps (NWI) were reviewed for the proposed project area and a site reconnaissance was conducted to determine validity of NWI Maps. NWI maps indicated that there are no wetlands adjacent to the project area. The site reconnaissance conducted by the Kentucky Engineering Group, PLLC on July 11, 2017, also confirmed no wetlands are located



within the proposed project area. No impacts to wetlands are anticipated as part of the PAA or NAA.

4.9 Wild and Scenic Rivers

No designated State Wild or Scenic Rivers are present within the Project Area. Therefore, no impacts to these resources are anticipated as part of the PAA or NAA.

4.10 Hazardous, Toxic, and Radioactive Waste (HTRW)

A Phase 1 HTRW Environmental Site Assessment was conducted for the Hollybush/ KY 645 Water and Sewer Extension Project to identify environmental conditions and to identify the potential presence of HTRW contamination located in the project's construction work limits. Below are the following Phase 1 HTRW findings:

The Corps HTRW staff determined the Phase 1 HTRW showed no evidence of recognized environmental contamination within the property and no further HTRW action is required. Therefore, no impacts to HTRW are anticipated with the PAA. A clearance memorandum was signed by Corps HTRW staff September 6, 2017.

The NAA would not result in ground disturbing activities, and thus would not disturb areas of potential HTRW contamination. Therefore, there are no HTRW impacts associated with the NAA.

4.11 Cultural Resources

Coordination with the Kentucky Heritage Council (KHC) under Section 106 of the National Historic Preservation Act (NHPA) was initiated by Kentucky Engineering Group, PLLC. KHC determined that there will be no historic properties affected by the proposed undertaking. There are no architectural resources eligible for or listed in the National Register of Historic Places that would be impacted by this project; therefore, no additional consultation is necessary for architectural resources.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the Corps has made the determination that no historic properties will be affected by the PAA and no further consultation under Section 106 of the NHPA is necessary (Appendix B). Additionally, there would be no impacts associated with the NAA.

If unanticipated archaeological deposits or human remains are discovered during construction, all work near the location of the discovery shall cease and the Project Manager and Huntington District Archaeologist shall be contacted immediately. The Kentucky State Police, the Martin County Coroner, and KHC must also be notified immediately if human remains are discovered.



4.12 Threatened and Endangered Species

According to the U.S. Fish and Wild Service (USFWS) website, there are four threatened and endangered listed species in Martin County, Kentucky. They are the Big Sandy crayfish (*Cambarus callainus*), Indiana bat (*Myotis sodalist*), Grey bat (*Myotis grisescens*), and Northern Long-Eared bat (*Myotis septentrionalis*).

In correspondence dated January 19, 2017, the USFWS stated the Service does not think installation of the proposed water and sewer lines is likely to result in significant impacts to federally-listed species”. The proposed water and sewer lines would occur in existing road rights-of-way and previously cleared areas. No trees would be removed for this project and directional boring would be implemented to cross Coldwater Creek. Therefore, the Corp’s Huntington District has determined the proposed action would have no effect on the Big Sandy crayfish, Indiana bat, Grey bat, and Northern Long-Eared bat. No further Section 7 consultation under the Endangered Species Act is required.

4.13 Air Quality

According to the U.S. Environmental Protection Agency (USEPA) website, Martin County is classified as “in attainment” (maintaining applicable standards) for all criteria pollutants. Emissions from construction equipment would occur during the construction period. Contractors would operate all equipment in accordance with local, state, and Federal regulations. The PAA is exempted by 40 CFR Part 93.153 from making a conformity determination, since estimated emissions from construction equipment would not be expected to exceed de minimis levels, direct emissions of a criteria pollutant, or its precursors. Any impacts would be short-term, localized, and would occur only during construction phase activities. Impacts to air quality under the PAA would be temporary during construction and minor.

No impacts to air quality are anticipated to occur as part of the NAA.

4.14 Noise

Noise associated with the PAA would be limited to that generated during construction except for noise at the pump station. The noise associated with construction would be short in duration and would only occur during daylight hours. Noise is measured as Day Night average noise levels (DNL) in “A-weighted” decibels that the human ear is most sensitive to (dBA). There are no Federal standards for allowable noise levels. According to the Department of Housing and Urban Development Guidelines, DNLs below 65 dBA are normally acceptable levels of exterior noise in residential areas. The Federal Aviation Administration (FAA) denotes a DNL above 65 dBA as the level of significant noise impact. Several other agencies, including the Federal Energy Regulatory Commission, use a DNL criterion of 55 dBA as the threshold for defining



noise impacts in suburban and rural residential areas. According to Dr. Paul Schomer in his 2001 Whitepaper, while there are numerous thresholds for acceptable noise in residential areas, research suggests an area's current noise environment, which has experienced noise in the past, may reasonably expect to tolerate a level of noise about 5 dBA higher than the general guidelines. The Corps Safety and Health Requirements Manual provides criteria for temporary permissible noise exposure levels (see Table 3.1 below), for consideration of hearing protection or the need to administer sound reduction controls.

Duration/day (hours)	Noise level (dBA)
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105

Construction noise would be similar to that of farm equipment and other small machinery used in the local area. A backhoe, end loader, road grader and/or vibratory roller are examples of equipment that is likely to be used during construction. Each emits noise levels around 85 dBA at 45 feet. Construction equipment would be operated during daylight hours; therefore a reasonable exposure time of two hours would be expected during the time residents may be home during the day. Peak outdoor noise levels ranging from 78-90 dBA would occur during the time in which equipment is directly in front of or in proximity to homes and businesses (within 25-100 feet). A maximum noise exposure of approximately 98 dBA, for one hour could occur if equipment were within 10 feet of homes and business. The noise projections do not account for screening objects, such as trees, outbuildings or other objects that muffle and reduce the noise being emitted. The outdoor construction noise would be further muffled while residents are inside their homes. While the construction noise generated would be considered unacceptable according to HUD and FAA standards, these limited exposures and time intervals are still within allowable Corps safety levels. Further, they are similar to typical neighborhood noise generated by gas powered lawnmowers in the local area, which could range from 90-95 dBA at three feet and 70-75 dBA at 100 feet

As part of the PAA, the water pump station will be located at the water treatment plant site in a masonry building and the sewage pump station will be located below ground within the mechanical yard at the new school. These two pump stations will only generate noise when operating. Operation is anticipated during daylight hours with the exception of occasional nighttime running during sporting events. Very little noise will be detected from a distance greater than 50 feet from each station. Due to daytime construction of the water and sewer lines and limited duration of elevated noise levels associated with the PAA, impacts from the noise to local residences would be minor.



There would be no change in noise and thus no impact under the NAA.

4.15 Environmental Justice and Protection of Children

Executive Order (E.O.) 12898 requires Federal actions to address environmental justice in minority populations and low-income populations. According to the U.S. Census Bureau, the 2016 population estimate for Martin County was 12,002 and does not contain significant minority populations. The 2015 census indicates Perry County is 91.8% white and has a median household income of \$25,795 compared with the median household income of \$43,740 for the Commonwealth of Kentucky. Individuals residing in the county below the poverty level is 40% compared to 18.5% statewide.

EO 13045 requires each Federal agency “to identify and assess environmental health risks and safety risks that may disproportionately affect children” and “ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” This EO was prompted by the recognition that children, still undergoing physiological growth and development, are more sensitive to adverse environmental health and safety risks than adults. The potential for impacts on the health and safety of children is greater where projects are located near residential areas.

Service provided by the water and sewer extension would provide utility service for the new high school building. Implementation of the PAA would provide the high school with a safe reliable water and sewer system, thereby improving the living environment for all visitors, staff, and students. No homes or buildings would be impacted by the proposed project; therefore, the PAA meets the directive of EO 12898 and EO 13045 by avoiding any disproportionately high adverse human health or environmental effects on minority or low income populations or children.

No positive impacts to minority or low income populations or children are anticipated to occur from the NAA.

4.16 Aesthetics

The project area is rural, consisting primarily of hillsides and roadways. Temporary disturbance of the local aesthetics would be anticipated during construction of the water and sewer extension; however after construction, the excavated sites would be restored to original conditions. The water storage tank is the one permanent change to the aesthetics of the area. Trees surrounding the tank site will help shield the tank from view. Additionally, there are no residences or businesses in the nearby vicinity of the tank to be effected by the location of the tank.

Neither the PAA nor NAA would significantly impact local aesthetics.

4.17 Transportation and Traffic



The proposed water line will follow Route 908 for a short stretch then on private property until after the proposed water store tank where it will be on Martin County School Board property. The sewer lift station will be on School Board property and the wastewater collection line on Kentucky Department of Transportation rights-of-way along KY Route 645. No new traffic patterns will occur as a result of this project. Construction of the PAA in and along existing road rights of way would involve some delays in the normal traffic flow. Construction on or near road surfaces would be in compliance with Kentucky Transportation Cabinet Guidelines. All appropriate guidelines for traffic control would be implemented and emergency access would be maintained. Impacts anticipated to occur from the PAA would be minimal and temporary.

No impacts to transportation and traffic are anticipated to occur from the NAA.

4.18 Health and Safety

The PAA has been designed to provide safe, reliable public water and proper disposal of wastewater to students and staff at the new school. The connection of the school to the existing wastewater system will prevent sewage from entering area streams or groundwater. Therefore, the PAA is anticipated to have a long term beneficial impact on health and safety for users of the facility and area residents.

Under the NAA, users of the facility would not have use of the new facilities and instead have to use temporary structures for class rooms which are not designed for long term use. This could cause negative impacts on the health and safety of all users of the school.

4.19 Cumulative Effects

The Corps must consider the cumulative effects of the proposed project on the environment as stipulated by NEPA. 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 (40 CFR Part 1508.7 Council on Environmental Quality [CEQ] Regulations).

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 construction of a water



system would have minimal and insignificant negative impacts on the environment. Long term beneficial effects will result from the project and would include health and safety. The temporal limits for assessment of this impact would initiate in 1972 with the passage of the Clean Water Act and end 50 years after completion of this project. The geographical extent would be broadened to consider effects beyond the PAA. The geographical extent considered is the Tug Watershed.

Then Tug Watershed is listed in the Environmental Protection Agency's Waterbody Quality Assessment Report where it is listed as impaired for sediment, salinity, turbidity, and PCBs. In the past, other villages and counties within the watershed have performed upgrades to existing water systems. These past actions had similar temporary impacts but no significant cumulative impact. The Tug 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 USDA, but currently, no 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 Tug Watershed is expected to continue.

Section 4.0 documents the existing environment and potential environmental effects of the PAA and NAA with respect to existing conditions. The effects of the PAA, as discussed beforehand, are localized and minor. Past actions that may have resulted in similar effects may include water and sewer system improvement actions and the construction of the high school. No reasonably foreseeable future actions that would have similar impacts as the proposed action were identified. In scoping cumulative effects issues, no resources were identified as having a potential to be significantly affected. Only minor and temporary impacts to ecological resources would be sustained with the implementation of the PAA. These resources would be reestablished upon completion of construction.

The availability of Federal funds through programs, such as the 531 Program, to assist communities with installation and construction of water-related environmental infrastructure and resource protection and development projects in Kentucky, is an additional benefit. The significance of this action on health and safety would be positive. Given the current program is in place for the foreseeable future and the overall beneficial effect from implementation of the PAA, there is expected to be a positive, though small, cumulative effect on health and safety based on past, present, and reasonably foreseeable actions.

5.0 Status of Environmental Compliance

The PAA is in full compliance with all local, state, and Federal statutes as well as Executive Orders. Compliance is documented below in Table 2.



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

*Anticipated FONSI signature to occur after public review

6.0 REQUIRED COORDINATION

6.1 Agencies Contacted

Direct coordination with the KHS, NRCS, Kentucky Department of Fish and Wildlife Resources, and USFWS was completed prior to publication of the EA. Agency correspondence is included in Appendix B.

6.2 Public Review and Comments

The EA and FONSI will be made available for 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, Mountain Citizen, advising the public of this document's availability for review and comment. A copy of the EA will also be placed in the Martin 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 EA is located in Appendix C.



7.0 CONCLUSION

The Hollybush / KY 645 Water and Sewer Extension project will provide safe drinking water and proper wastewater disposal for the new high school in Martin County, Kentucky. The proposed project will protect the health and safety of all users of the school facility. No significant adverse impacts have been identified as a result of implementation of the proposed improvements project.

The majority of construction would take place on previously disturbed land and land that is isolated from the most area residents and businesses. Health and safety would be realized immediately with project implementation. Effects associated with construction would be minor and temporary. BMPs would be implemented during construction to minimize impacts to residents and the environment. Therefore, the PAA would not be expected to have significant impacts on the human environment.