



**US Army Corps  
of Engineers®**

Pittsburgh District

Planning and Environmental Branch  
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1000 Liberty Avenue  
Pittsburgh, Pennsylvania 15222

Public Notice Date: 4 October 2018  
Expiration Date: 18 October 2018

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## **NOTICE OF AVAILABILITY**

### **Draft Environmental Assessment**

#### **Sullivan Run Local Protection Project (LPP) PL 84-99 Emergency Repair Project in Butler County, PA**

The U.S. Army Corps of Engineers, Pittsburgh District (USACE) is evaluating an emergency repair project in Sullivan Run, within the Sullivan Run LPP, City of Butler, Butler County, Pennsylvania.

The USACE invites submission of comments on the environmental impact of the emergency repairs to the Sullivan Run LPP. The USACE will consider all submissions received before the expiration date of the public comment period. The nature or scope of the proposal may be changed upon consideration of the comments received.

The draft Environmental Assessment and draft Finding of No Significant Impact are available electronically at:

<http://www.lrp.usace.army.mil/Missions/Planning-Programs-Project-Management/>

**Comments can be submitted to the address posted at the top of this notice or to Erin.Stuart@usace.army.mil. Comments must be received by 18 October 2018 to ensure consideration.**

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# EMERGENCY REPAIR PROJECT

## **DRAFT** ENVIRONMENTAL ASSESSMENT

October 3, 2018

**Prepared By:** Environmental and Cultural Resources Section  
Planning and Environmental Branch  
U.S. Army Corps of Engineers (USACE), Pittsburgh District

### **1. Emergency Response Action:** Sullivan Run Local Protection Project (LPP)

**2. Authority:** Public Law 84-99 as amended (33 U.S.C. 701n). USACE has authority under PL 84-99, for emergency management activities. Under PL 84-99, the Chief of Engineers, acting for the Secretary of the Army, is authorized to undertake activities including disaster preparedness, advance measures, emergency operations (flood response and post flood response), rehabilitation of flood control works threatened or destroyed by flood, protection or repair of federally authorized shore protective works threatened or damaged by coastal storm, and provisions of emergency water due to drought or contaminated source. Under the authority of PL 84-99, an eligible flood protection system can be rehabilitated if damaged by a flood event. Rehabilitation of non-Federal projects will be cost shared, with 20 percent of the construction cost from the non-Federal Sponsor (NFS) for cost sharable items. Rehabilitation of Federal projects will be at 100 percent Federal cost for cost sharable items. All systems considered eligible for PL 84-99 rehabilitation assistance have to be in the Rehabilitation and Inspection Program (RIP) prior to the flood event. Acceptable operation and maintenance by the public sponsor are verified by levee inspections conducted by the Corps on a regular basis. The Corps has the responsibility to coordinate levee repair issues with interested Federal, State, and local agencies following natural disaster events where flood control works are damaged.

**3. Sullivan Run LPP Location and Design:** The Sullivan Run LPP is a Non-Federal project, located in the City of Butler, Butler County, Pennsylvania and is operated and maintained by the City of Butler. The City of Butler is the NFS for the Sullivan Run LPP. It is located at 40.864796° N latitude by -79.905177°W longitude. The LPP is 575 feet in length. It consists of 90 feet of concrete retaining wall and 485 feet of rectangular channel in Sullivan Run, a tributary to Connoquenessing Creek. The channel height is 7 feet. Limited stream bank vegetation is present. The surrounding area is urban residential. See Figure 1 for the location of the damaged area.

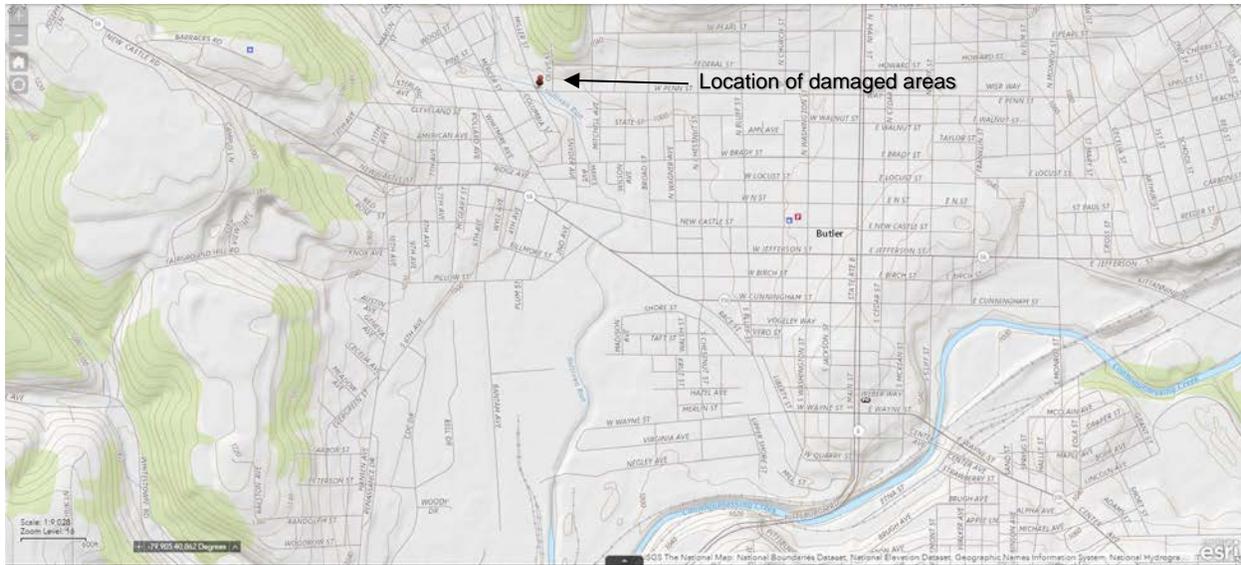


Figure 1. Location of damaged areas.

**4. Weather Event and Sullivan Run LPP Damage Assessment:** During 5-6 July 2017, the City of Butler experienced severe flooding due to heavy rains. Extrapolation of the nearest gauges (the local area lacks stream and precipitation gauges to accurately determine the amount of flow or rainfall) indicates that the area received about three inches of rain within 24 hours, with the flow in Sullivan Run ranging from about 1,230 cfs to 2,800 cfs. Stream flow was impeded by large amounts of woody debris that collected at the multiple street crossings and resulted in Sullivan Run overtopping its banks and affecting approximately 150 structures. This flood event also damaged the LPP, resulting in a scour hole along the outside of a turn in the stream between Miller and West Penn Streets and failure of the safety fencing and wooden retaining boards along the top of the retaining wall (Figure 2). The scour hole presents a risk to the structural stability of the LPP retaining wall.

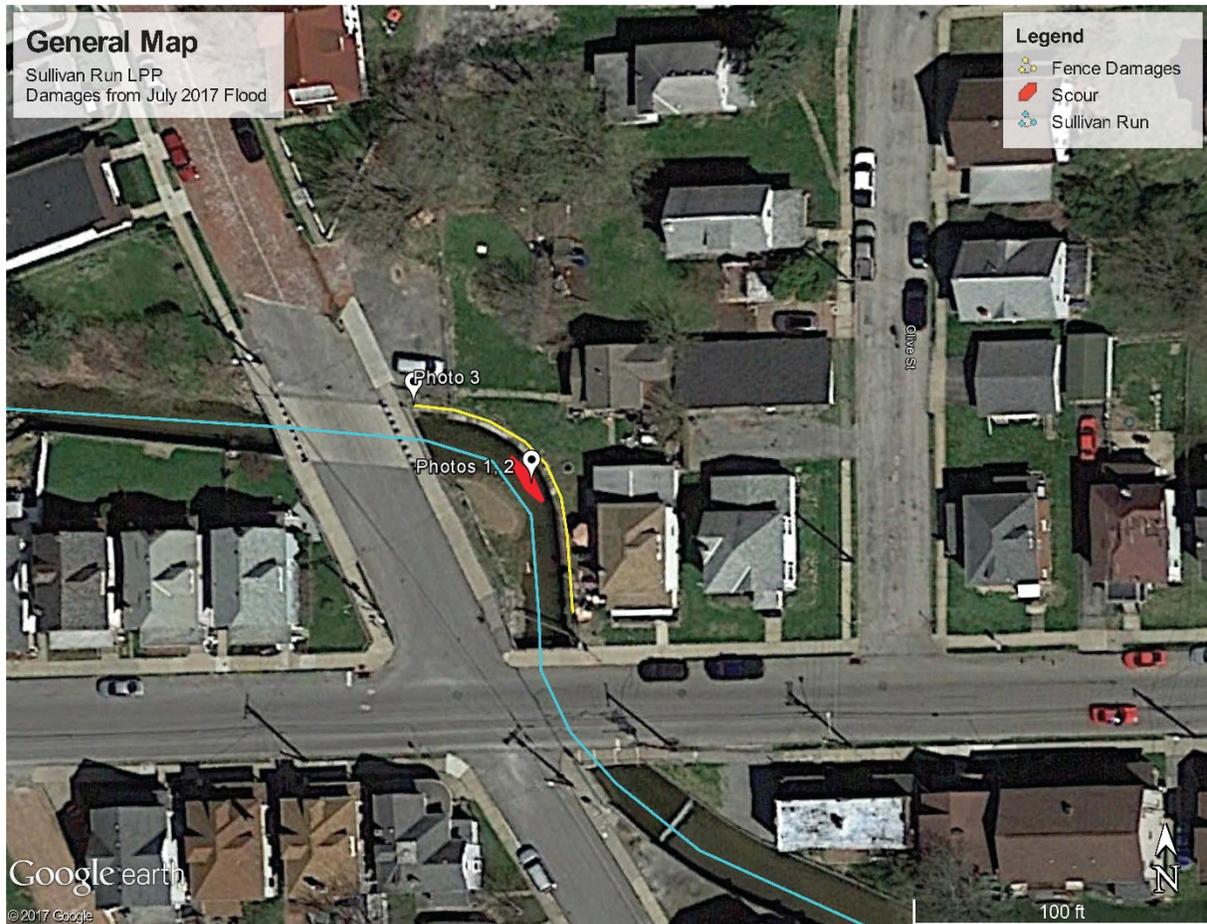


Figure 2. Overview image of damaged areas. See below for referenced photos.

Specific damages include:

- a. Scour Area – A scour hole formed within the streambed between the Miller Street and West Penn Street Bridges (Photo 1) as a result of this flood event. The scour hole is approximately 15 feet long, 4 feet wide, with a depth of 1.5 feet below the typical streambed elevation. At this location, a pre-existing masonry wall was improved with concrete toe protection and incorporated into the overall LPP. According to as-built drawings, the depth of concrete toe protection beneath the streambed varies, but is a minimum of 1-foot into streambed material or 6 inches into rock. Material presumed to be concrete was found between the scour hole and the wall (Photo 2), which could have been the result of a previously-repaired scour hole. Undercutting of the hard material is occurring, but the extent of the undercutting is unknown. If left unchecked, the scour threatens to further undermine the concrete-like material, the toe protection, and eventually reduce the stability of the masonry wall.



Photo 1 – View of scour area looking downstream. See Figure 2 for location of photo.



Photo 2. View of scour area. See Figure 2 for location of photo.

- b. Fencing and Wooden Retaining Boards – During the flood event, the chain link fence and wooden 2x10 boards, located on the top of the existing masonry wall, were washed away for the length between the Miller Street and West Penn Street Bridges (Photo 3). Wooden 2x10 boards were placed against the fence posts to retain the adjacent yard. The NFS has removed most of the fencing and the remains of the wood boards. The upstream half of the fencing was offset from the top of the wall by 1 to 2 feet, whereas the downstream portion of fence was located on the wall. The property owner placed some landscaping bricks and concrete debris at the top of the masonry wall after the flood event. In addition, a large tree grew around and subsumed the fence on the downstream end. The tree was cut down several years ago, but the stump remains in place.

Repairs to the top of the wall include replacing the missing portion of fence along the wall (approximately 90 feet). The new fence will be offset from the top of the wall by approximately 2 feet to avoid overstressing and causing damage to the existing wall. The ends of the new fence will tie into the existing fencing. In order to tie into the downstream portion, the tree stump will need to be cut flush to the ground. Additionally, the landscaping bricks and concrete debris will need to be removed and the adjacent yard will be regraded at a 2.5H:1V slope to ensure stability.



Photo 3. Looking downstream along the top of the wall where the safety fence was located. See Figure 2 for location of photo.

**5. Purpose and Need:** The purpose of this action is to restore Sullivan Run to pre-flood conditions, including placement of hardened fill into the scour area, replacement of

the fence, and grading the adjacent yard above the wall to a stable slope. The rain event of 5-6 July 2017, necessitated this action by creating conditions that, if not addressed, may potentially adversely impact local infrastructure, the environment and public safety.

**6. Repair Alternatives:** The Corps has considered the following alternatives to address the damages:

No Action: Under this alternative, no Federal action would be taken to correct the problems which resulted from the 5-6 July 2017 flood. If no action is taken, the scour area will continue to erode and eventually undermine the toe protection and reduce the stability of the existing masonry wall, resulting in collapse of the wall. Nearby properties, potentially including the West Penn Street Bridge, would be exposed to further damage. The project is no longer providing its designed level of flood protection, and without corrective action, conditions at the project will continue to degrade which increases the risk to life and property. Therefore, the “No Action” alternative would not satisfy the intent of this authority and the “No Action” alternative was not considered feasible in this case.

Alternative 1: Alternative 1 is a non-structural relocation plan. For this alternative, all structures that are no longer protected by the damaged project would be purchased and residents moved from within the floodway. Approximately 48 residential structures would require purchase. The residents would then have to be relocated resulting in potentially significant social impacts.

This alternative was discarded because a preliminary assessment of tax assessor records showed the costs of purchasing 48 homes and relocating 48 families was deemed too high as compared to the costs of other alternatives.

Alternative 2: Alternative 2 would return the project to pre-damage conditions, restoring the authorized design level of protection by filling the scour hole with large riprap and restoring the fence to pre-flood conditions. This alternative was discarded after determining that riprap would be ineffective and the pre-flood condition of the fence was unsafe.

Alternative 3: Alternative 3 is the recommended alternative. Alternative 3 (Recommended Plan) would return the project to pre-damage conditions, restoring the design level of protection to the community. The proposed emergency includes filling a scour hole (about 15 feet long by 4 feet wide and 1.5 feet deep) with a hardened fill material such as grouted riprap or concrete, rebuilding 100 feet of 4-foot tall safety fencing, and grading the adjacent slope from the top of the existing masonry wall. The work would be conducted by heavy equipment operating from the banks. A temporary diversion will be needed to complete repairs to the scour area. In order to maximize flow around the temporary cofferdam, the sediment along the right bank will need to be removed. Currently, the scour area has a hard shelf beneath the concrete footer. The proposed action would extend this existing hardened shelf.

**7. Environmental Setting:** The Sullivan Run LPP is located within the City of Butler, PA. This non-federal flood protection project is on Sullivan Run, a tributary to Connoquenessing Creek. The project was originally constructed by the Commonwealth of Pennsylvania, with construction completed during December 1994. The Sullivan Run watershed (HUC 050301050403) is 6.6 square miles. The proposed action is in the northwestern portion of the City of Butler, approximately 1 mile upstream from the confluence of Sullivan Run with the Connoquenessing Creek. The project area is highly impacted by the surrounding urban residential area.

Riparian vegetation surrounding the LPP is very limited. Vegetation is predominantly mown grass lawns adjacent to the LPP. Riparian trees exist along Sullivan Run outside and between the LPP features. Portions of the stream bottom consist of gravel, rock, and sand, while other portions of the LPP include a concrete channel. PA DEP (<http://www.depgis.state.pa.us/integratedreport/index.html>) has rated Sullivan Run in the project area as impaired (category 5, assessment ID 4250), noting an unknown source and cause of the impairment. The Connoquenessing Creek, at the confluence with Sullivan Creek, is noted as impaired by siltation (Category 5, assessment ID 16456) due to urban runoff / storm sewers.

A search of the Pennsylvania Natural Diversity Index (PNDI) indicated that no species of concern are known for this project area (PNDI-638279).

**8. Environmental Effects of the Proposed Action:**

<b>Environmental Parameter</b>	<b>No-Action Alternative</b>	<b>Alternative 3 (Recommended Alternative)</b>
Land Use & Socio-Economic Conditions	<b>Major Effect.</b> Denial of the request would maintain the status quo. Conditions will likely continue to deteriorate and property damage and infrastructure damage could occur.	<b>Minor Effect.</b> The current land use patterns would not be significantly affected. The local socio-economic conditions may even improve slightly with the completion of the emergency repairs.
Vegetation and Wildlife Habitat	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>Minor Effect.</b> Temporary impacts to vegetation may occur during construction activities. Vegetated areas would be reseeded after construction activities are complete. Wildlife may leave the area during construction activities but would be expected to return once construction is complete.
Water Quality and Fisheries	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>Minor Effect.</b> Stream impacts during construction are expected to be minor and include temporary increases in turbidity and minor changes in bottom

		characteristics where the scour hole would be repaired. No significant adverse impacts are expected due to the already degraded condition of the stream.
Floodplains	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>Minor Effect.</b> The project is located within the floodplain. Temporary effects to the floodplain will occur during construction.
Noise	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>Minor Effect.</b> Construction equipment and activities would temporarily increase noise in the area during construction. Given the urban nature of the area, the short duration of the impact, and incorporation of best management practices, increased noise is not expected to be a significant impact.
Aesthetics	<b>Minor Effect.</b> Denial of the request would maintain the status quo. Nearby properties may be exposed to further damage.	<b>Minor Effect.</b> The presence of construction equipment and supplies during construction will have a temporary impact on aesthetics. Restoration of the LPP should improve aesthetics over the current damaged condition.
Recreation	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>No Effect.</b> The project area is located within an urban residential area. No effects to recreation are anticipated.
Endangered Species	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>No Effect.</b> The PNDI search (PNDI-638279) indicated that there are no effects to threatened or endangered species nor to designated critical habitat.
Historic and Archaeological Resources	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>No Effect.</b> The area has been previously disturbed by the construction of the LPP. A search of Pennsylvania's CRGIS shows no historic properties in the vicinity of the proposed action.
Traffic	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>Minor Effect.</b> Minor temporary effects to traffic may occur during construction. No permanent traffic effects are expected.
Public Safety	<b>Major Effect.</b> Conditions will likely continue to deteriorate and property damage and infrastructure damage could occur.	<b>Minor Effect.</b> Restoration of the LPP will improve public safety.
Wetlands	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>No Effect.</b> No impacts to wetlands are anticipated.

Hazardous and Toxic Waste	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>No Effect.</b> Clean fill will be used and proper waste disposal will occur.
Air Quality	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>Minor Effect.</b> Minor emissions increase in the vicinity of the repairs would be expected but are expected to be short-term and well below the <i>de minimis</i> threshold.
Minority & Low-Income Populations	<b>No Effect.</b> Denial of the request would maintain the status quo.	<b>No Effect.</b> The proposed action will not involve siting of new facilities, but consists of repair of an existing structure. It will not have a disproportionately high adverse human health impact to any environmental justice community.

**9. Cumulative Effects:** Routine operation and maintenance of the LPP by the City of Butler is anticipated. The USACE 2017 inspection report of the LPP noted that ongoing maintenance should be continued. Maintenance activities include continuing sediment and vegetation removal and monitoring and repair of existing masonry walls.

Cumulative impacts result from the incremental impacts of an action, when added to other past, present, and reasonably foreseeable future actions - regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Following review of the proposed project’s scale, the resources considered in Section 8, and information made available to the agency, no significant cumulative effects of the proposed action are anticipated. Temporary construction-related increases in noise, emissions and traffic, and temporary minor impacts to vegetation, floodplains, water quality and aesthetics would not be significant even if they occur simultaneous to expected repairs/maintenance of the LPP.

**10. Coordination:** USACE will provide a copy of this report to the appropriate agencies during the public comment period. A 15-day public comment period will occur from **4 October 2018 to 18 October 2018**.

**11. Principal Environmental Laws and Executive Orders considered, where applicable, in conjunction with NEPA.**

**Public Laws:**

- American Indian Religious Freedom Act, 42 U.S.C. 1996 et seq.
- Archeological and Historic Preservation Act, 16 U.S.C. 469 et seq.
- Archeological Resources Protection Act, 16 U.S.C. 470aa-11, et seq.
- Bald and Golden Eagle Protection Act, 16 U.S.C. 668, et seq.
- Clean Air Act, as amended, 42 U.S.C. 1857h-7, et seq.
- Clean Water Act, 33 U.S.C 1251 et seq.
- Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601 – 9675.
- Endangered Species Act, 16 U.S.C. 1531 et seq.

Farmland Protection Policy Act, 7 U.S.C. 4201, et seq.  
Fish and Wildlife Conservation Act, 16 U.S.C. 2901-2911, et seq.  
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.  
Historic Sites Act, 16 U.S.C. 461-467, et seq.  
Land and Water Conservation Fund Act, 16 U.S.C. 460/-460/-11, et seq.  
National Environmental Policy Act, 42 U.S.C. 4321, et seq.  
National Historic Preservation Act, 16 U.S.C. 470a, et seq.  
Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001 et seq.  
Noise Control Act of 1972, 42 U.S.C. 4901-4918.  
Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq.  
Rivers and Harbors Act 33, U.S.C. 401 et seq.  
Safe Drinking Water Act 42 U.S.C. 300 et seq.  
Toxic Substances Control Act, 15 U.S.C. 2601 – 2671.  
Wild and Scenic Rivers Act, 16 U.S.C. 1271, et seq.

**Executive Orders (EO):**

11514 Protection and Enhancement of Environmental Quality  
11593 Protection and Enhancement of the Cultural Environment  
11988 Floodplain Management  
11990 Protection of Wetlands  
12088 Federal Compliance with Pollution Control Standards  
12114 Environmental Effects Abroad of Major Federal Actions  
12898 Federal Actions to Address Environmental Justice in Minority Populations  
and Low-Income Populations

**Regulations:**

Advisory Council on Historic Properties, Protection of Historic and Cultural  
Properties (36 CFR Part 800 et seq.).  
Council on Environmental Quality, Regulation for Implementing the Procedural  
Provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508).  
U.S. Army Corps of Engineers, Procedures for Implementing NEPA (33 CFR 230).  
U.S. Army Corps of Engineers, EC 1165-2-216, Water Resources Policies and  
Authorities, Policy and Procedural Guidance for Processing Requests to Alter US  
Army Corps of Engineers Civil Works Projects, Pursuant to 33 USC 408.  
U.S. Department of Agriculture, Regulations for Implementing the Farmland  
Protection Policy Act (7 CFR 658).  
U.S. Environmental Protection Agency, Clean Air Act Implementing Regulations (40  
CFR Part 50 et seq.).  
U.S. Environmental Protection Agency, Criteria and Standards for the National  
Pollutant Discharge Elimination System (40 CFR Part 125).

**12. Summary/Conclusion:** Based on the above analysis, the restoration of the Sullivan Run LPP, in the manner described above, is not a major Federal action significantly affecting the quality of the human or natural environment, and therefore does not require preparation of an environmental impact statement.

The USACE invites submission of comments of the environmental impact of the approval the Sullivan Run LPP Emergency Repair Project. Comments will be

considered in determining whether it would be in the best public interest to proceed with the approval. The USACE will consider all submissions received before the expiration date of the public comment period. The nature or scope of the proposal may be changed upon consideration of the comments received. If significant effects on the quality of the human environment are identified, which cannot be mitigated, the USACE will initiate an Environmental Impact Statement, and afford all of the appropriate public participation opportunities attendant to an EIS.

## **DRAFT FINDING OF NO SIGNIFICANT IMPACT**

### **Sullivan Run Local Protection Project Emergency Repairs Butler County, Pennsylvania**

In accordance with the National Environmental Policy Act (NEPA) and implementing regulations, a **draft** Environmental Assessment (EA) was developed to evaluate potential impacts associated with emergency repairs to the Sullivan Run Local Protection Project in accordance with Public Law 84-99, the Flood Control and Coastal Emergency Act. Under PL 84-99, the Chief of Engineers, acting for the Secretary of the Army, is authorized to undertake activities including disaster preparedness, Advance Measures, emergency operations (Flood Response and Post Flood Response), rehabilitation of flood control works threatened or destroyed by flood, protection or repair of federally authorized shore protective works threatened or damaged by coastal storm, and provisions of emergency water due to drought or contaminated source. Under the authority of PL 84-99, an eligible flood protection system can be rehabilitated if damaged by a flood event.

The project supports the rehabilitation of the Sullivan Run Local Protection Project (LPP), located in the City of Butler, Butler County, Pennsylvania, that was damaged by a flood event during 5-6 July 2017. Specific damages include the formation of a scour hole and damage to fencing.

Per USACE guidance, the agency considered four alternatives including a No Action alternative (no repairs), Alternative 1 (buy-out of existing properties), Alternative 2 (placement of riprap into the scour hole and fence replacement) and Alternative 3 (placement of hardened fill into the scour hole, fence replacement, and slope grading). No other feasible alternatives were identified for evaluation in the EA. Alternative 3 is the recommended alternative and the Proposed Action.

The EA determined that the Proposed Action will not result in significant impacts to the natural or human environment, and does not require the preparation of an Environmental Impact Statement (EIS). All environmental, social, and economic factors that are relevant to the proposal were considered in this assessment. These include, but are not limited to, water quality, air quality, floodplains, public safety, noise, wetlands, wildlife, threatened and endangered species, and cultural resources. Anticipated impacts include temporary, minor impacts to air quality (emissions), noise, traffic, aesthetics, vegetation, floodplains, and water quality resulting from construction activities. Best management practices would be used to minimize effects, including temporary erosion control measures. Temporary minor beneficial impacts include socioeconomic conditions, aesthetics, and public safety.

No effects to land use, wetlands, threatened and endangered species, cultural resources, recreation, hazardous, toxic and radioactive substances and environmental justice populations are expected. Overall, effects are expected to be non-significant.

A 15-day public comment period will occur from 4 October 2018 to 18 October 2018.

The USACE will consider all submissions received before the expiration date of the public comment period. The nature or scope of the proposal may be changed upon consideration of the comments received. If significant effects on the quality of the human environment are identified during public comment which cannot be mitigated, the USACE will initiate an Environmental Impact Statement, and afford all of the appropriate public participation opportunities attendant to an EIS.

After having carefully evaluated all aspects of the Proposed Action and based on the draft EA, I have reasonably concluded that the Proposed Action does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not required and will not be prepared.

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Andrew J. Short  
Colonel, Corps of Engineers  
District Engineer

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Date