MEMORANDUM FOR RECORD

SUBJECT: Water Street, Barboursville, WV Section 14 Emergency Stream bank Protection Project - Revision to Recommended Alternative in the approved Detailed Project Report.

BACKGROUND: The Final Detailed Project Report (DPR) and Integrated Environmental Assessment and Finding of No Significant Impact (FONSI) for the Barboursville Section 14 project was approved in July 2017. Since approval of the DPR, multiple high water events in 2018 resulted in additional erosion and bank failure within the project area. The change in site conditions has resulted in the need to modify the project in order to meet project objectives. The amended Barboursville, WV Section 14 project is currently funded by the Supplemental Appropriations in the Bipartisan Budget Act of 2018.

The original recommended plan consisted of a stone buttress and lagging panel replacement. In February 2019, the Project Delivery Team recommended modifying the plan to consist of replacing the stone buttress with two sections of wall comprised of H-pile and lagging with anchoring, two sections of lagging replacement, and armoring of a storm drain outfall.

Due to new information from soil borings, the site was determined suitable to support a stone buttress instead of the wall and anchor system. The proposed project construction consists of, limited, benched excavation of failed soils to stable foundation geometries, the placement of filter and reinforcement fabric under 24” stone with a toe of slope key in in two areas adjacent to Water Street. The upstream extents of construction are approximately 280 linear feet and downstream extents at the Water Street and McClung Ave. intersection are approximately 160 linear feet. Wooden lagging will be replaced in one section of the project area. Illustrations depicting the plan view of features of the original plan and the newly revised plan are included as an attachment to this memorandum.

The purpose of this memorandum is to document consideration of environmental effects of the revised recommended plan and address the status of statutory compliance under National Environmental Policy Act.

COMPLIANCE DETERMINATION: The revised alternative is a minor variation of the original recommendation and is qualitatively within the spectrum of alternatives discussed in the previously approved and publicly circulated DPR and Integrated Environmental Assessment and FONSI in which the effects were determined be insignificant. Re-evaluation of effects associated with the revised plan concludes adverse effects on the quality of the human environment would be reduced. Therefore, like the original plan, the revised plan would have no significant adverse effect on the quality of the human and/or natural environment. As such, no supplemental documentation is required and the NEPA process is concluded.

EFFECTS OF REVISED RECOMMENDED PLAN: In summary, the environmental effects of the revised Recommended Plan will result in similar, or slightly reduce adverse effect in some resources areas. A brief summary of the anticipated environmental effects for resource areas which would realize a change in effect is provided below.
**Surface Waters and Other Aquatic Resources**

The revised Recommended Plan, like the previously recommended plan would reduce long-term localized sediment deposition caused by active erosion and failure of the riverbank in the project reach. The impact of the original plan had minor and insignificant impacts to surface waters. As the footprint of construction would be similar to the original plan, temporary impacts associated with construction would remain minor and would be minimized by following best management practices. Like the original plan, implementation of the revised Recommended Plan is expected to have a positive long-term impact on water quality within the proposed project area as it would prevent further erosion of soils into the adjacent Guyandotte River.

The revised treatment would continue to avoid fill material below Ordinary High Water Mark. Therefore, a Clean Water Act (CWA) Section 401 individual water quality certification permit and a CWA 404(b)1 analysis is not required for the proposed action.

**Wildlife Habitats**

The revised Recommended Plan would involve removal of vegetation for the stone buttress and lagging panel replacement treatment. Existing vegetation adjacent to the treatment within the project construction work limits would not be removed. Tree removal within the majority of the project area occurred in March 2019 by the sponsor to ensure compliance with seasonal tree clearing restrictions. Due to an abundance of invasive species, limited clearing, and limited regrowth of vegetation adjacent to the proposed treatment, terrestrial impacts of the revised recommended plan would, like the previously recommended plan, also be considered minor.

**Endangered and Threatened Species**

There are three federally listed threatened and endangered species which may reside within the project area – these species include the Pink mucket (pearlymussel) (*Lampsilis abrupta*) mussel, Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*).

While impact to terrestrial resources and associated habitat are slightly reduced with the revised recommended plan, minimal tree clearing continues to be necessary to implement the revised plan. As such, the revised plan, like the original plan, would result in a “not likely to adversely affect” determination under the Endangered Species Act for the Indiana Bat and Northern long-eared bat. As documented in the Detailed Project Report and Environmental Assessment, the District will maintain the commitment to perform seasonal tree clearing between November 15 and March 31, to reduce potential adverse effects to listed bat species.

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Figure 1. Recommended Plan as documented in the July 2017 Detailed Project Report

Figure 2. Revised Treatment