

DRAFT
FINDING OF NO SIGNIFICANT IMPACT

NAME OF PROPOSED ACTION: Section 14 Batesville Wastewater Facility, Independence County, Arkansas

PURPOSE AND NEED FOR THE PROPOSED ACTION: The purpose for this project is to design a method of erosion protection in the toe zone and bank zone of the proposed project location that satisfies both the objectives laid out by Batesville Water Utilities and the rules and regulations that govern the U.S. Army Corps of Engineers. An Environmental Assessment (EA) titled “Section 14, Batesville Wastewater Treatment Plant Bank Stabilization, Independence County, AR” was prepared to determine if any significant impacts would occur as a result of the proposed action.

The bank of the White River adjacent to the Batesville wastewater treatment plant is slowly eroding away. The erosion is accelerated when the banks of the river is exposed to high water for long durations as it was during the spring of 2002. If the bank stability problem is not rectified, then the structure of existing aeration ponds will be comprised. If the bank should fail, the contents of the aeration ponds will drain into the White River.

ALTERNATIVES: The following alternatives were evaluated in detail in the attached EA:

Proposed Action: The recommended alternative for solving the erosion problem adjacent to the aeration ponds is to use bendway weirs constructed from the river. Bendway weirs push the attack from the river’s flows and the existing thalweg away from the bank and allow for aggradation to occur over time between adjacent structures due to the development of slack water areas. Additionally, they will also help support aquatic life by providing habitat. Furthermore, the use of bendway weirs will allow for most of the existing tree line to remain, will require only minimal removal of trees at each bendway weir location, and is the most economical alternative. Compared to construction from land, bendway weirs constructed from the river will result in smaller amounts of trees needing to be cleared and significantly smaller quantities of rock. However, due to the fluctuation of water surface elevations, construction by land will maintain a more reliable construction schedule. Overall, selection of this alternative will meet most of Batesville Water Utilities’ objectives.

The bendway weirs shall begin immediately downstream of the existing longitudinal riprap revetment. Each bendway shall consist of a weir into the river and a key that is buried landward from the bank. Bendway weir length is dependent on location of proposed thalweg. They shall have a 5-foot crest width at an elevation of 233.0 NAVD88. Side slopes will be at 1V: 1.5 H. See the EA for locations of bendway weirs. The key height for the bendway weirs will crest at Elevation 259, which coincides with a 20-year flood event. Increasing the key crest elevation to the 100-year will only provide a small increase in protection and a large increase in costs due to the increase in the quantity of stone.

The recommended stone to be used is Grade Stone A. Use of this grade of stone eliminates the need for a filter between existing ground and stone. Moreover, this grade has been used on rivers of similar magnitude and resulted in success.

Four different alternatives other than the proposed action were also considered to prevent and rectify erosion of the bank: (1) a longitudinal revetment; (2) longitudinal peak stone toe protection; (3) “hard points”; and (4) the no action.

A longitudinal revetment - if constructed from the river, will allow for a fairly thin tree line to remain adjacent to the aeration ponds and will provide protection from further erosion along the bank. On the contrary, a longitudinal revetment will result in removal of a majority of the trees along the bank, will not be aesthetically pleasing, and only portions of the tree line shall remain if the revetment is constructed from the land.

Longitudinal peak stone toe protection (LPSTP) - if constructed from the river, will allow for a thicker tree line to remain adjacent to the aeration ponds than will a longitudinal revetment, will require only a minimal amount of tree removal in the toe zone, and will somewhat prevent and rectify erosion along the toe and an insufficient distance into the bank zone. However, LPSTP will not be aesthetically pleasing when the water surface elevation is below the peak of the LPSTP, which is a majority of the time. The LPSTP, constructed from land, is more intrusive leaving only portions of the tree line.

Hard points - whether constructed from river or land, will allow for a majority of the existing tree line to remain adjacent to the aeration ponds and will require only localized tree removal at each hard point location. In addition, slack water areas will develop between the structures, which will both rectify and prevent erosion of the bank though initial scalloping may occur. These areas could promote aquatic habitat development. Although hard points may not be aesthetically pleasing initially, vegetation will eventually grow on top of the hard points and become more aesthetically pleasing.

The no action alternative - will satisfy a majority of the objectives laid out by Batesville Water Utilities; however, it will not prevent erosion from occurring along the bank. Degradation will continue to occur and may possibly result in breach of the aeration ponds. Either condition would increase the cost of fixing the problem greatly.

ANTICIPATED ENVIRONMENTAL IMPACTS:

Consideration of the effects disclosed in the EA, and a finding that they are not significant, is necessary in order to prepare a FONSI. This determination of significance is required by 40 CFR 1508.13. Additionally, 40 CFR 1508.27 defines significance as it relates to consideration of environmental effects of a direct, indirect or cumulative nature.

Criteria that must be considered in making this finding are addressed below, in terms of both context and intensity. The significance of both short and long term effects must be

viewed in several contexts: society as a whole (human, national); the affected region; the affected interests; and the locality. The context for this determination is primarily local, as shown in Figure 1 of the EA. The context for this action is not highly significant geographically, nor is it controversial in any significant way. Consideration of intensity refers to the magnitude and intensity of impact, where impacts may be both beneficial and adverse. Within this context, the magnitude and intensity of impacts resulting from this decision are not significant. The determination for each impact topic is listed below.

1. **The degree to which the action results in both beneficial and adverse effects. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.** The EA indicates that there will be beneficial effects such as preventing the encroachment of the White River into the Batesville Wastewater Facility that is highly probable in the future if the No Action alternative is implemented. Adverse construction related effects, from implementation of proposed action, will occur but are minor in intensity and construction related only.
2. **The degree to which the action affects public health or safety.** As previously stated the Proposed Action will protect public safety by preventing possible future encroachment of the White River into the Batesville Wastewater Facility which would dump the contents of the facility directly into the river. No adverse effects to public health or safety will result from the Proposed Action. Under existing conditions, no hazardous materials are identified on the site. Implementing the Proposed Action would not create hazardous conditions affecting public health or safety.
3. **The degree to which the action affects unique characteristics of the potentially affected area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** No such unique characteristics or resources have been identified in the project area.
4. **The degree to which effects on the quality of the human environment are likely to be highly controversial.** The project will benefit the public therefore the Little Rock District, Corps of Engineers does not regard this activity as controversial, and the expected public response to the EA should bear this out.
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** There is no uncertainty involving the impacts of this action. Bank stabilization and construction of bendway weirs will ensure that the White River will not degrade the shoreline further and jeopardize the integrity of the Batesville Wastewater Facility.
6. **The degree to which the action may establish a precedent for future actions with significant impacts.** The bank stabilization will not establish any precedent for future action that has significant impacts. Past, present and future stabilization

projects in the vicinity of the river were considered in the impact analysis of the EA.

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** Cumulative effects analyses for the physical and biological resources that would potentially be affected are presented in the EA. Cumulative effects on these resources focus on disturbed soils, vegetation loss, habitat loss, or other impacts relating to construction activities involved in the Proposed Action. The Proposed Action would not result in any cumulative impacts in regard to any reasonably foreseeable action in the project area.
8. **The degree to which the action may adversely affect items listed or eligible for listing in the National Register of Historic Places, or other significant scientific, cultural or historic resources.** The proposed action alternative should have no adverse effects on cultural resources. The study area was surveyed for cultural resources in April 2004 and in August of 2006 by the District Archeologist. The area was found to be highly disturbed from previous construction of the Batesville Wastewater Treatment Facility. This information was submitted to the State Historic Preservation Offices of Arkansas and they have concurred with the finding that no cultural resources should be impacted. If during construction cultural resources are discovered, construction will cease and a thorough investigation will be conducted.
9. **The degree to which the action may adversely affect an endangered or threatened species or its critical habitat.** Coordination with the U.S. Fish and Wildlife Service indicates that there are no federally listed threatened or endangered species within the immediate project area. The proposed action presented in this EA would not have any adverse impacts to the Ozark hellbender (*Cryptobranchus alleganiensis bishopi*), a candidate for listing as threatened or endangered by the U.S. Fish and Wildlife Service that could exist in the vicinity of the project area or state listed species of concern such as the western sand darter (*Ammocrypta clara*) and the slenderhead darter (*Percina phoxocephala*).
10. **Whether the action threatens a violation of Federal, State or local law or requirements imposed for the protection of the environment.** No such violations will occur. Permits from other jurisdictional agencies will be obtained prior to any construction activities. Continued coordination with regulatory agencies will be ongoing to ensure compliance with all federal, state, regional, and local regulations and guidelines.

CONCLUSIONS:

The impacts identified in the prepared EA have been thoroughly discussed and assessed. No impacts identified in the EA would cause any significant adverse effects to the human environment. Therefore, due to the analysis presented in the EA and comments received from a 30-day public review period that began on December 7, 2006, and ended on January 19, 2007, it is my decision that the preparation of an Environmental Impact Statement (EIS) as required by the National Environmental Policy Act (NEPA) is unwarranted and a "Finding of No Significant Impact" (FONSI) is appropriate. The signing of this document indicates the Corps final decision of the proposed action as it relates to NEPA. The EA and FONSI will be held on file in the Planning and Environmental Office for future reference. Consultation with regulatory agencies will be ongoing to ensure compliance with all federal, state, regional, and local regulations and guidelines.

Date

Wally Z. Walters
Colonel, US Army
District Engineer