U. S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, Texas 76209

FEMA

FINDING OF NO SIGNIFICANT IMPACT
CITY OF BENTONVILLE
IMPROVEMENTS TO LAKE BELLA VISTA DAM,
BENTON COUNTY, ARKANSAS
FEMA 1975-DR-AR (PW 1562)

BACKGROUND

The City of Bentonville, Arkansas, has applied to the Federal Emergency Management Agency (FEMA) for funding assistance with a project to repair the Lake Bella Vista Dam located in Lake Bella Vista Park just outside the town of Bella Vista (36.43270, -94.23091). Authority for the project is provided by the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 USC §§5121 et seq.). FEMA's Public Assistance Program funds the restoration or construction of facilities to replace facilities that have sustained damage due to presidentially declared natural disasters. This project will restore the dam's function, long-term usability, and safety by removing and replacing the existing structure.

An Environmental Assessment (EA) was prepared in accordance with the guidelines established in 44 Code of Federal Regulations (CFR), Subpart B, Section 10.9; Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; and regulations promulgated by the President's Council on Environmental Quality (40 CFR §§1500-1508). The purpose of this EA is to analyze the potential environmental and social impacts of the improvements to Lake Bella Vista Dam project and to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Two project alternatives were considered in this EA: 1) No Action; and 2) the removal of the currently existing Bella Vista Dam which is located on Little Sugar Creek and replacing it with a new dam structure constructed within the footprint and at the same height of the original dam (Proposed Action). The project area is within Bentonville's city limits and adjacent to US Route 71 (36.43270, -94.23091). Under the No Action Alternative, the existing dam structure would remain as-is with no improvements to its condition through repair or rehabilitation efforts. The dam would not adhere to the safety regulations of the Arkansas Natural Resource Commission (ANHC) and would continue to pose a serious safety risk. Further, the functionality and usability of the dam is a concern, as the severely degraded dam is currently beyond its functional life, particularly in the presence of future floods. If left in the current partially-breached state, the dam is likely to experience a complete failure and uncontrolled release of the lake contents (water and sediment) into the downstream floodplain of Little Sugar Creek.

The Proposed Action Alternative is to replace the existing dam structure with a zone earthfill embankment with concrete facing on the crest and upstream and downstream slopes. The conceptual design of the dam's principal spillway is a reinforced concrete overflow weir, with reinforced concrete-lined approach section and discharge basin, and reinforced concrete

sidewalls. The weir crest elevation will match the current normal lake operating level and will provide approximately the same spillway discharge capacity as the two existing spillways. The dual outlet gates in the spillway weir section will be provided for lowering the lake level when necessary. Construction equipment will be staged in the adjacent asphalt and concrete parking area located east and west of the dam. The City of Bentonville has identified a borrow pit for fill material located in Benton County, approximately 9 miles southwest of the project area (36.351147, -94.358624). There may be a need for a temporary cofferdam and the dewatering or drawing down of the lake during construction. Also, the dam will be constructed in two stages to manage the flow of Little Sugar Creek. The existing west spillway will be used to temporarily divert Little Sugar Creek during the eastern half of dam construction. The western half of the dam will be completed by allowing the stream to use the newly constructed east spillway. The spillway structure will be spanned by a pedestrian bridge with reinforced concrete abutments. As part of the proposed dam construction, 0.7 acres of trees and brush will be removed adjacent and north of the dam. The new dam design will prevent normal flows from sweeping and eroding the toe of the dam. Based on the on the HEC-RAS obtained from FEMA in September, 2008, the proposed dam replacement project will maintain the hydraulic characteristics of Little Sugar Creek, both upstream and downstream of the dam during flood events. The HEC-RAS is an U.S. Army Corps of Engineers (USACE) computer program that is widely used to develop floodplain models based on a hydraulic analyses of a watershed for the National Flood Insurance Program (NFIP).

A public notice was posted in the *Benton County Daily Record* newspaper on February 18 and March 4, 2015, and the draft EA was made available for comment at the Bentonville Public Library and on the FEMA website for a 30-day public comment period. A total of 75 public comments (including 3 that were submitted after the end of the comment period) were received by FEMA in response to the EA. Of the 75 comments, 6 were inquiries for information. Besides private citizens, the Arkansas Game and Fish Commission provided one of the comments.

Below is a summary of the total percentage based on the 66 comments (the 3 comments submitted after the end of the comment period and the 6 inquiries for information have been subtracted from the 75 comments).

- Against the proposed project: 55 (83.3%)
- For the proposed project: 11 (16.7%)

The percentages can be further broken down by the number of individuals who provided comments. Individuals who provided multiple comments are only counted once. A total of 58 individuals provided comments.

- Against the proposed project: 47 (81%)
- For the proposed project: 11 (19.0%)

Most of the comments appear to be personal opinions based on the individual's viewpoint. However, the comments regarding the potential presence of karst geology in the project area and how the deed restriction limited the project alternatives were considered more substantial. To addresses these issues, the Final EA has been revised to include the following information below.

- The Final EA now references a geotechnical report prepared by Grubbs, Hoskyn, Barton & Wyatt, Inc. titled Geotechnical Investigation – Phase I, Lake Bella Vista Dam, Bella Vista, Arkansas dated September 2009. This report has concluded that karst geology does not exist in the project area.

- The Final EA now includes the statement from the City of Bentonville in which they interpreted the deed in the EA as being inconsistent with the restrictions in the Special Warranty Deed file of record in Benton County, Arkansas, dated November 21, 2006, in Deed Book 2006, Page 55778, following the purchase of Lake Bella Vista Park by the City of Bentonville from Bentonville/Bella Vista Trailblazers Association, Inc.

FINDINGS

The Proposed Action as described in the EA will not significantly impact the resources associated with climate, geology, soils, air quality, water quality, wetlands, floodplains, biological resources, cultural resources, and socioeconomic resources. All populations, including minority and low-income populations, will benefit from the Proposed Action.

CONDITIONS

The following conditions must be met as part of this project. Failure to comply with these conditions may jeopardize the receipt of federal funding.

1. This review does not address all federal, state and local requirements. Acceptance of federal funding requires the City of Bentonville to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.
2. The City of Bentonville is required to submit Storm Water Pollution Prevention Program (SW3P) and National Pollutant Discharge Elimination System (NPDES) permit applications, and obtain these permits prior to construction. Implementation of appropriate Best Management Practices (BMP) will be required at the construction location in order to minimize erosion; these may include the installation of silt fences, rock check dams, and permanent revegetation of disturbed soils.
3. Excavated soil and waste materials will be managed and disposed of in accordance with applicable local, state, and federal regulations. If contaminated materials are discovered

during construction activities, work will cease until the appropriate procedures and permits can be implemented for cleanup and disposal.

4. If karst features are found during construction, the City of Bentonville will initiate consultation with the Arkansas Natural Heritage Commission (ANHC), the U.S. Fish and Wildlife Service (USFWS), and other relevant agencies to ensure that potential habitat of threatened or endangered species will not be affected.
5. Potential impacts to the air quality in the area will be mitigated by the use of water spray as a dust suppressant, as needed, to control the dust in the areas being disturbed. Fuel-burning equipment running times will be kept to a minimum and their engines will be properly maintained.
6. If the proposed project requires additional excavation to groundwater depths, the City of Bentonville will initiate consultation with the U.S. Environmental Protection Agency (EPA) and the Arkansas Department of Environmental Quality (ADEQ) to identify appropriate mitigation.
7. The City of Bentonville will coordinate with the USACE to confirm the type of Section 404 permit required during project design and construction.
8. The City of Bentonville is responsible for preparing the Final Public Notice for activities in the floodplain pursuant to 44 CFR, Part 9.12.
9. The City of Bentonville will comply with the City of Bentonville Flood Damage Prevention Ordinance.
10. The project will leave standing dead trees and snags within the project area (when practicable) to benefit bats and other wildlife species.
11. Construction protocols will be developed in the event that bald eagles are observed near the construction site.
12. In the event that archeological deposits, including any Native-American pottery, stone tools, bones, or human remains, are uncovered, the project shall be halted, and the City of Bentonville will stop all work immediately in the vicinity of the discovery and take reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured and access to the sensitive area restricted. The City of Bentonville will inform FEMA immediately, and FEMA will consult with the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO), and the Tribe(s). Work in the sensitive areas cannot resume until consultation is completed, and appropriate measures have been taken to ensure that the project is in compliance with the National Register of Historic Places (NHPA).
13. Any hazardous materials discovered, generated, or used during construction will be disposed of and handled in accordance with applicable local, state, and federal regulations.
14. Signage will be posted near the project site alerting Lake Bella Vista Park visitors and staff of construction traffic.

15. The City of Bentonville will coordinate with Carroll Electric Coop to ensure the project does not impact their utility lines in the area of the proposed project.
16. The City of Bentonville will implement park closures, advisories and alerts to keep visitors safe during extreme weather events.
17. It will be the responsibility of the City of Bentonville to use their normal protocols by way of public meetings, news/press releases or the like to notify the public regarding the completion, availability, and posting of the Final EA and FONSI.
18. Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

CONCLUSIONS

Based on the findings of the EA, coordination with the appropriate agencies, and adherence to the project conditions set forth in this FONSI, FEMA has determined that the proposed project qualifies as a major federal action that will not significantly affect the quality of the natural and human environment, nor does it have the potential for significant cumulative effects. As a result of this FONSI, an EIS will not be prepared (44 CFR §10.9) and the proposed project as described in the associated EA may proceed.

APPROVAL

Date 8/26/15

Kevin Jaynes
Regional Environmental Officer
FEMA Region 6

George A. Robinson

Date 8-26-15

George A. Robinson
Regional Administrator
FEMA Region 6