

Finding of No Significant Impact
for
Rehabilitation of Floodwater Retarding Structure No. 5 of the Oak Creek Watershed
Washita County, Oklahoma

I. AGENCY ROLE AND RESPONSIBILITY – United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS).

In accordance with the NRCS regulations (7 CFR Part 650) implementing the National Environmental Policy Act (NEPA), NRCS has completed an Environmental Assessment (EA) of the following proposed action:

Dam rehabilitation of Floodwater Retarding Structure (FWRS) Oak Creek No. 5 in Washita County, Oklahoma.

II. NRCS DECISION TO BE MADE

To determine if the preferred alternative (Alternative 2 – Rehabilitation to High Hazard Criteria) will or will not be a major Federal Action significantly affecting the quality of the human environment. The EA accompanying this finding has provided the analysis needed to assess the significance of the potential impacts from the selected alternative.

III. PURPOSE AND NEED FOR ACTION

To continue providing flood damage reduction in the area downstream of Oak Creek No. 5 and public fish and wildlife benefits (water-based recreation) while minimizing environmental, economic and social impacts, and comply with applicable dam safety and performance standards to reduce the potential for flood damages and loss of life from a catastrophic breach. The Public Law 83-566 purposes for Oak Creek No. 5 are Flood Prevention (Flood Damage Reduction) and Public Fish and Wildlife. The needs are to maintain flood protection downstream and to address dam safety and performance deficiencies of the existing high-hazard dam that are not in compliance with NRCS and the Oklahoma Dam Safety Agency standards. There is a potential for loss of life due to the existence of two residences downstream of this structure within the breach inundation zone. There are four county roadways downstream of this structure within the breach inundation zone. The population-at-risk (PAR) is 6.

IV. ALTERNATIVES CONSIDERED IN THE EA

Three alternatives were analyzed in the EA and are characterized as follows:

Alternative 1 – No Action: Under the No Action Alternative, the dam would remain in the existing unsafe condition with no action to improve the dam from its original design or to correct safety deficiencies beyond maintenance or replacements performed in accordance with its operation and maintenance plan.

Alternative 2 – Rehabilitation to High Hazard Dam (Preferred Alternative): Upgrade the dam to meet current NRCS safety criteria and performance standards for a high hazard dam. Extend the

service life of the dam to 100 years and maintain flood protection. This alternative would consist of slip-lining the existing 30-inch principal spillway, installing a new principal spillway consisting of a 30-inch reinforced concrete pipe (RCP) conduit with a hooded inlet, installing an impact basin, and constructing a 300-foot-wide auxiliary spillway roller compacted concrete (RCC) chute over the existing embankment.

Alternative 3 – Rehabilitate to Significant Hazard Dam with Flood Proofing and Floodplain Easements: This would require installing a new principal spillway 30-inch RCP conduit with a hooded inlet, installing an impact basin, constructing an 80-foot-wide auxiliary spillway RCC chute over the existing embankment, floodproofing two residences, and procuring floodplain easements in the breach inundation area.

V. NRCS' DECISION AND FACTORS CONSIDERED IN THE DECISION

Based on the evaluation in the EA, NRCS and the Sponsor selected Alternative 2 (Rehabilitation to High Hazard Dam) as the preferred alternative. NRCS has taken into consideration all of the potential impacts of the proposed action, incorporated herein by reference from the EA and balanced those impacts with considerations of the agency's purpose and need for action.

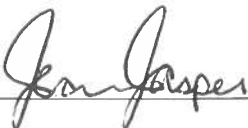
NRCS acknowledges that based on the EA, potential impacts to soil, water, air, plants, animals, energy and humans were considered in account of a public need. As a result, the agency's preferred alternative (Alternative 2) would result in benign short-term and long-term negative impacts while addressing the need for rehabilitation to high hazard to reduce risk of loss of life.

VI. FINDING OF NO SIGNIFICANT IMPACT

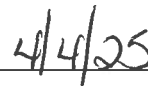
To determine the significance of the action analyzed in the EA, the agency is required by NEPA regulations at 40 CFR Section 1501 and NRCS regulations at 7 CFR Part 650 to consider the context and intensity of the proposed action. In response to the analysis of the EA, NRCS finds that neither the proposed action nor any of the alternatives is a major Federal Action significantly affecting the quality of the human environment. Therefore, preparation of an Environmental Impact Statement (EIS) on the final action is not required under the NEPA and Council on Environmental Quality (CEQ) implementing regulations (40 CFR Part 1500-1508), or NRCS environmental review procedures (7 CFR Part 650). This finding is based on the following factors:

- 1) Temporary short-term impacts to streams and conservation pool due to sedimentation may occur during construction activities. Environmental consequences of the construction activities will be insignificant due to proposed mitigation, avoidance, and minimization put in place by a required Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will be in place prior to and during all construction activities.
- 2) An additional Aquatic Resources Protection Plan, required by 404 permitting due to impacts to jurisdictional waters, will be in place prior to and during all construction activities. This plan will outline strategies to conserve and manage aquatic ecosystem specific areas, including rivers, lakes, streams, wetlands, and marine ecosystems adjacent to the action area of the project.

- 3) No compensatory mitigation is anticipated with the rehabilitation of the dam. The proposed alternative will keep the permanent conservation pool elevation the same as the existing pool elevation.
- 4) Consultation with USFWS has resulted in a “no effect” conclusion for the Lesser Prairie Chicken, and “may affect, not likely to adversely affect” conclusion for Piping plover, Red knot, Whooping crane, and Monarch butterfly. Consultation with USFWS will be ongoing.
- 5) There will be temporary short-term adverse impacts to vegetation (trees/shrubs) within the action area. Trees will be felled prior to construction activities and will occur outside of the primary nesting season for migratory birds, and during local bat species inactive period (Nov 15 – Mar 14). Post construction, vegetation will be allowed to reestablish within the action area.
- 6) Permanent impacts are associated with the 300-foot-wide permanent roller compacted concrete auxiliary spillway over the embankment. Approximately 1.5 acres will be converted to a concrete spillway. This action will not have long-term negative effects on any threatened or endangered species that may be located within the action area and will not impact critical habitat for any species.
- 7) Proposed alternative does not significantly impact public health. Dam rehabilitation will reduce the risk associated with a potential catastrophic dam failure, reducing the risk of loss of life.
- 8) NRCS regulations (7 CFR Part 650) and policy (Title 420, GM Part 401) require that NRCS identify, assess, and avoid effects to historic or cultural resources, park lands, prime farmlands, wetlands, or ecologically critical areas (Title 190 National Compliance Handbook). NRCS made the determination of “no historic properties (including archaeological sites) affected” by the proposed Alternative 2. The Oklahoma Archaeological Survey, the Oklahoma State Historic Preservation Office, the Caddo Nation, Comanche Nation, and Quapaw Nation have concurred with this determination.
- 9) The proposed action does not violate Federal, State, or local law requirements imposed for protection of the environment. The major laws identified with the selection of Alternative 2 include the Clean Water Act, Clean Air Act, Endangered Species Act, National Historic Preservation Act, and Migratory Bird Treaty Act. Alternative 2 is consistent with the requirements of these laws. Based on the information presented in the attached EA, NRCS finds, in accordance with 40 CFR Section 1508.13, that the selection of the agency preferred alternative (Alternative 2) is not a major Federal Action significantly affecting the quality of the human environment; therefore, not requiring preparation of an EIS.



JEANNE JASPER
Oklahoma State Conservationist
Natural Resources Conservation Service



Date