

**Environmental Assessment, Finding of No Significant Impact, and Draft Decision Notice
Doyle Creek Watershed Joint District (WJD) 86 Floodwater Retarding Dam (FRD) 11
Project Marion County, Kansas**

Project Name: Doyle Creek Watershed Joint District 86 Floodwater Retarding Dam 11

Project Initiation Date: 05/01/2022

Proponent Name: Brian Lang, Contracting Officer

Responsible Federal Official (RFO): Kris Ethridge, Acting State Conservationist

State: Kansas

County(ies): Marion, Kansas

Anticipated Implementation: 02/01/2024

Signing Authority: Kris Ethridge, Acting State Conservationist

Project File: Natural Resources Conservation Service, Salina, Kansas

General Location: Marion County, Kansas (38.1977 decimal degrees, -97.2182 decimal degrees) **Applicable Management Areas:** Not Applicable

Watersheds: Doyle Creek Watershed located in the Upper Cottonwood Watershed

I. AGENCY ROLE AND RESPONSIBILITY

In accordance with the Natural Resources Conservation Service (NRCS) regulations (40 CFR 1500 – 1508, 7 CFR 650, & 7 CFR 622) implementing the National Environmental Policy Act (NEPA), NRCS has completed an environmental review of the proposed action (Project) to construct a low hazard floodwater retarding dam, FRD 11, within the Doyle Creek Watershed. The proposed action is Federally assisted, authorized under Public Law 83-566, the Watershed Protection and Flood Prevention Act. The Doyle Creek Watershed Plan and Environmental Impact Statement (Plan-EIS) was completed in January 1992, and authorized for Federal installation assistance in August 1995. The Supplemental Environmental Assessment (EA) accompanying this finding was completed to update the environmental analysis specifically for FRD 11.

II. NRCS DECISION TO BE MADE

As the delegated responsible Federal official for compliance with NEPA, I must make the following decision: I must determine if the Agency's proposed action 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 proposed action. The decision on which alternative is to be implemented and the significance of that alternative's impacts are under Section IV of this Finding.

III. PURPOSE AND NEED FOR ACTION

The purpose of the Doyle Creek Watershed Joint District 86 FRD 11 project is to improve flood reduction and improve water quality. The District has identified Doyle Creek FRD 11 as

a priority site in their Watershed Work Plan that will provide flood reduction, and water quality improvements in the Doyle Creek Watershed. The project is needed to address ongoing flood hazards in the watershed that contribute to road damage, crop loss, and structure damage along Doyle Creek and the town of Peabody, Kansas.

IV. ALTERNATIVES CONSIDERED IN THE EA

NRCS National Watershed Manual (501.12) requires that all reasonable alternatives, that address the purpose and need for action, must be presented in the watershed project plan, including those not within the program authorities of the NRCS, and those not preferred by sponsors. For watershed project plans involving flood protection, consideration must be given to alternative measures to prevent or reduce flood damage, including but not limited to floodproofing of structures; floodplain regulation; acquisition of floodplain lands for recreational, fish and wildlife, and other public purposes; moving buildings and facilities; and conversion of land use to forest. Seven alternatives were analyzed in the EA and are characterized as follows:

1. No Action/Future Without Federal Investment (FWOFI). The FWOFI alternative describes the most likely future condition that could be expected if NRCS takes no action and does not construct the proposed action. It describes what is most likely to happen in the absence of any developed Federal alternative, changes in law or public policy. The FWOFI is used to compare other alternatives to determine the magnitude of benefits and adverse effects. Under the FWOFI, the proposed FRD 11 would not be constructed. No flood reduction benefits, or sediment storage would be realized.
2. Proposed Action: Construction of low hazard FRD 11. The planned project at FRD 11 is a low hazard flood control dam that will control a 1.54 square mile drainage area. The dam is planned as an earthfill dam, with a storage capacity of 107 acre-feet in the sediment pool, 257 acre-feet of detention storage above the sediment pool, and an overall total storage capacity at top of dam of 660 acre-feet. The principal spillway structure will be a 42-inch diameter RCP riser inlet with trash rack and anti-vortex appurtenances. The outlet will be 24-inch diameter RCP conduit and 8-inch diameter PVC pipe will be used for the drawdown conduit. The auxiliary spillway will have a channel bottom width of 100-feet with a level control section that is 30-feet long, and will be covered with vegetative erosion protection. The Reaffirming Feasibility Study concluded that the construction of FRD 11 was economically feasible with a benefit/cost (B/C) of 1.0.
3. Alternative 1: A non-structural alternative. Includes acquisition of easements for property that is located within the 100-year recurrence interval floodplain, that would otherwise be protected by a dam, as well as upgrading roads and bridges to account for inundation potential. The no structure alternative included additional land treatment practices, and changes to upstream land use for the 1.54 square

miles of contributing drainage area of FRD 11. There would be no measurable reduction in flooding from this no structure alternative. Other potential no structure alternatives considered for evaluation included downstream floodplain acquisition/purchasing easements and floodproofing affected properties. The expected significantly higher cost for implementation makes these alternatives not feasible.

4. Alternative 2: A dry dam alternative. A dry dam would function in providing the same magnitude of flood control but would operate without a permanent pool. It would provide flood protection to agricultural land, rural transportation facilities, and rural residential structures. Compared with the proposed planned FRD 11, construction of a dry dam would have additional costs associated with the larger drawdown structure, more substantial drawdown inlet, and increased haul distances for borrow to construct the embankment making it less cost-effective than Proposed Action.
5. Alternative 3: A dry dam with fish passage alternative. A dry dam with fish passage spillway alternative concept was developed as an alternative to a traditional dry dam. The dam would function like the dry dam alternative, but also allow for fish passage to reduce the project impact to the stream. Compared to the proposed action, construction of FRD 11, the construction of a dry dam with fish passage would have additional construction costs associated with it making it less cost-effective than the proposed action.
6. Alternative 4: An alternate location. Alternative locations for FRD 11 were investigated to determine practicability based on availability of property, flood reduction benefits, and cost of construction. No practical location was identified downstream from the proposed site, with the main stem of Doyle Creek being approximately a tenth of a mile downstream. Alternative 4 is the construction of a low hazard dam upstream of the proposed action located on the west draw. This option would control 551.7 acres of drainage, which would be 56.0% of the area controlled by the planned FRD 11. This alternative was less cost-effective with reduced benefits (due to small drainage area), than proposed action and was not considered.
7. Alternative 5: A second alternate location. Alternative 5 is the construction of a low hazard dam upstream of the proposed action located, across both the east and west draws to control 767.2 acres of drainage, which would be 77.8% of the area controlled by the planned FRD 11. This alternative is less cost-effective with reduced benefits (due to small drainage area) than Proposed Action and was not considered.

V. NRCS'S DECISION AND FACTORS CONSIDERED IN THE DECISIONS

Based on the evaluation in the EA, the proposed action to construct Doyle Creek WJD 86 FRD

11 as the Agency's preferred alternative was selected. Every potential impact of the proposed action have been taken into consideration, incorporated herein by reference from the Supplemental Environmental Assessment and balanced those impacts with considerations of the NRCS's purpose and need for action.

In accordance with the Council on Environmental Quality's (CEQ) "40 Most Asked Questions" guidance on NEPA, Question 37(a), NRCS has considered "which factors were weighed most heavily in the determination" when choosing the Agency proposed action (construction of low hazard dam Doyle Creek WJD 86 FRD 11) to implement. Specifically, acknowledging that based on the Supplemental Environmental Assessment, potential impacts to soil, water, air, plants, fish and wildlife, and human resources were considered in the decision. As a result, the Agency's proposed action improvements, attached hereto and made a part hereof, and for the reasons provided below, that there will be no significant individual or cumulative impacts on the quality of the human environment as a result of implementing the Proposed Action, as authorized by Section 216 of the Flood Control Act of 1950, Public Law 81-516, 33 U.S.C. 701b-1; and Section 403 of the Agricultural Credit Act of 1978, Public Law 95-334, as amended by Section 382, of the Federal Agriculture Improvement and Reform Act of 1996, Public Law 104-127, 16 U.S.C. 2203 of the SWP; particularly when focusing on the significant adverse impacts which the NEPA is intended to help decision makers avoid and mitigate against.

VI. FINDING OF NO SIGNIFICANT IMPACT

To determine the significance of the action analyzed in this Supplemental Environmental Assessment, NRCS, is required by NEPA regulations at 40 CFR Section 1508.27 and NRCS regulations at 7 CFR Part 650, to consider the context and intensity of the proposed action. Based on the Supplemental Environmental Assessment, review of the NEPA criteria for significant effects, and based on the analysis in the EA, I have determined that the action to be selected, construction of low hazard dam Doyle Creek WJD 86 FRD 11 (Agency preferred alternative), would not have a significant effect upon the quality of the human environment. Therefore, preparation of an EIS on the final action is not required under section 102(2)(c) of the NEPA, CEQ implementing regulations (40 CFR Part 1500-1508, Section 1508.13), or NRCS environmental review procedures (7 CFR Part 650). This finding is based on the factors from CEQ's implementing regulations at 40 CFR Section 1508.27 and from NRCS regulations at 7 CFR Part 650:

- 1) The Supplemental Environmental Assessment evaluated both the beneficial and adverse impacts of the proposed action. It is anticipated the proposed action will provide long term beneficial impacts for environmental resources (i.e., soil, air, water, animals, plants, and human resources). As a result of the NEPA analysis (discussed in detail in section 3.6 and incorporated by reference), the proposed action, construction of Doyle Creek WJD 86 FRD 11, does not result in significant impacts to the human environment, particularly when focusing on the significant adverse impacts, which NEPA is intended to help decision makers avoid, minimize, and mitigate. The analysis shows there are temporary and short- and long-term

minor effects imposed by the project. With the implementation of stream mitigation as well as the implementation of BMPs during construction, short-term and long-term impacts to water resources are expected to be minor. No cumulative impacts are anticipated.

- 2) The proposed action, construction of Doyle Creek WJD FRD 11, will not result in significant adverse effects on public health or safety. It is expected to provide long term beneficial impacts to improve natural ecosystems functions. Specifically, soil, water, fish, wildlife, and land will be improved and protected through selection of the preferred alternative.
- 3) As analyzed in section 3.6 of the Supplemental Environmental Assessment, there are no significant effects to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas from selection of the proposed action, construction of Doyle Creek WJD 86 FRD 11. NRCS regulations (7 CFR Part 650) and policy (Title 420, General Manual, Part 401), require that NRCS identify, assess, and avoid effects to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas. In accordance with these requirements, it is not anticipated that implementing the proposed action, construction of Doyle Creek WJD 86 FRD 11, would have any major adverse effects on these resources. Potential impacts to streams will be mitigated in accordance with the USACE guidance and Kansas Stream Mitigation Guidelines (refer to EA Section 7.3). Wetland mitigation is not expected due to the minimal amount of inundation that wetlands would experience.
- 4) The effects on the human environment are not considered controversial for the proposed action, construction of Doyle Creek WJD 86 FRD 11. There are no impacts associated with the proposed action that would be considered controversial.
- 5) The proposed action is not considered highly uncertain and does not involve unique or unknown risks.
- 6) The proposed action, construction of Doyle Creek WJD 86 FRD 11, will not establish a precedent for future actions with significant effects, nor does it represent a decision in principle about future considerations.
- 7) The proposed action, construction of Doyle Creek WJD 86 FRD 11, will not result in individually or cumulatively significant adverse impacts to the human environment, particularly when focusing on the significant adverse impacts which NEPA is intended to help decision makers avoid, minimize, or mitigate. Cumulative impacts resulting from construction of Doyle Creek WJD 86 FRD 11 are anticipated to be beneficial overall with little to no threat to human environment

(see section 5.0 in the attached EA).

- 8) The proposed action construction of Doyle Creek WJD 86 FRD 11, will not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause loss or destruction of significance scientific, cultural, or historical resources. NRCS follows the procedures developed in accordance with a nationwide programmatic agreement between NRCS, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers, which called for NRCS to develop consultation agreements with State historic preservation officers and Federally recognized Tribes (or their designated Tribal historic preservation officers). These consultation agreements focus historic preservation reviews on resources and locations that are of special regional concern to these parties.
- 9) The proposed action, construction of Doyle Creek WJD 86 FRD 11, will not adversely affect endangered or threatened species or critical habitat as discussed in section 3.6 of the EA. It has been concluded that the proposed actions will have “No Effect” on threatened and endangered species identified for this project site. The United States Fish and Wildlife Service, which has jurisdiction over these species, has reviewed the report and has concurred with our findings. The concurrence letter provided by USFWS is included in the EA under Appendix A.
- 10) The proposed action will not violate Federal, State, or local law requirements imposed for protection of the environment as noted in section 3.0 of the EA. The major laws, orders, and permits identified with the selection of the preferred alternative, construction of Doyle Creek WJD 86 FRD 11, include the Clean Air Act; Section 404 - Clean Water Act Permit; Section 401 - Clean Water Act-Water Quality Certification (WQC); Section 402 - Clean Water Act – National Pollutant Discharge Elimination System Permit; Endangered Species Act (ESA); National Historic Preservation Act; 16 U.S.C. 668-668d, 54 Stat. 250, Bald and Golden Eagle Protection Act; Migratory Bird Treaty Act (MBTA); Fish and Wildlife Coordination Act; Executive Order 11988 - Floodplain Management; Executive Order 11990 -Protection of Wetlands; Executive Order 13112 - Invasive Species; Executive Order 13186 - Responsibilities of Federal Agencies to Protect Migratory Birds; Kansas Obstructions in Streams (K.S.A 82a-301 through 82a-328); Kansas Nongame and Endangered Species Conservation Act; and the Kansas Antiquities Act Statute (KSA 74-5401 through 74-5408). The preferred alternative is consistent with the requirements of these laws.

Based on the environmental assessment summary above and information presented in the attached Supplemental Environmental Assessment, NRCS finds in accordance with 40 CFR Section 1508.13 that the selection of the Agency proposed action to construct Doyle Creek WJD 86 FRD 11 is not a major Federal action adversely affecting the quality of the human environment and it has been determined that an

Environmental Impact Statement (EIS) is not required.

KRIS R. ETHRIDGE
Acting State Conservationist

Attachment: Supplemental Environmental Assessment for Doyle Creek Watershed Joint District
(WJD) 86 Floodwater Retarding Dam (FRD) 11