



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, KANSAS CITY DISTRICT
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Office symbol (ARIMS)

DRAFT FINDING OF NO SIGNIFICANT IMPACT

**Smoky Hill Aquatic River Ecosystem Restoration Study
Salina, Kansas**

Note: Bolded text indicates future dates that will be added following Public Review and during completion of the Final Report.

The U.S. Army Corps of Engineers, Kansas City District (Corps) has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated DATE OF IFR/EA, for the Smoky Hill River General Investigation Study (Study) addresses habitat restoration opportunities and feasibility in Salina, Kansas. The final recommendation is contained in the report of the Chief of Engineers, dated **DATE OF CHIEF'S REPORT**.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would restore degraded in stream aquatic habitat and emergent wetlands, reestablish capacity in the two reaches of the Old Channel of the Smoky Hill River while managing flow rates and sedimentation for the 50-year period of analysis within in the study area. The recommended plan is the National Ecosystem Restoration (NER) Plan and includes:

- Construction of a sediment forebay located at the confluence of the upstream end of the Old Channel and the Smoky Hill main channel to remove coarse sediment as water enters the Old Channel.
- Dredging of Reaches 1 and 2 of the Old Channel, which would remove channel sediment to a depth of approximately 7 feet, resulting in approximately 105,000 cubic yards of sediment removal.
- Reconstruction of Reaches 1 and 2 with a variable depth profile including riffles, pools, runs, and glides. Channel bottom width in both reaches would vary from 8 to 20 feet, top of water width would range between 30 to 50 feet, riffle depths would average 3.25 feet, and pool depths would be between 4 to 6 feet. Additionally, 1.7 acres of wetland shelves would be constructed along Reach 1 of the Old Channel, providing additional habitat and water quality benefits like nutrient and phosphorus removal.
- Re-use of the dredged materials from the Old Channel to construct variable depth wetland habitat around Lakewood Lake. An existing culvert would be excavated to hydrologically reconnect the Lakewood Lake wetlands with the Old Channel, raising the water level of Lakewood Lake approximately 6 feet. This would help to reestablish wetland hydrology and support the creation of approximately 35 acres of emergent wetland habitat.
- Removal of the Western Star Mill Weir and replace with five step pools. The existing structure would be taken down to grade, fill would be added downstream, and appropriately sized rock would be placed to create pools.

- Two habitat weir structures would be installed to support additional pool habitat. One would be located near the upstream end of the Old Channel and the other would be located near the downstream end of the Old Channel (at Walker Road). The weirs would be approximately 2-feet high and be comprised of a stoplog structure. Each weir would enable additional management of water depth in the channel to support pool habitat and water levels in Lakewood Lake.

The Recommended Plan, Alternative 3, was also identified as the National Ecosystem Restoration (NER) plan, meaning that it is the plan that reasonably maximizes ecosystem restoration benefits compared to implementation costs. Alternative 3 yields 56.8 Average Annual Habitat Units (AAHUs) for an average annual cost over the 50-year period of analysis, starting in 2026, of \$876,000. This equates to an average annual cost per AAHU of \$15,425. Implementation of this alternative would restore and improve the aquatic ecosystem structure and function of roughly 6.8 miles of riverine habitat within the Old Channel. The Recommended Plan is deemed acceptable by the City of Salina as the participating non-Federal Sponsor.

The Project First Cost is \$17,900,000, based on 2025 estimates. General Investigation (GI) studies are cost shared at 65% Federal and 35% non-Federal, resulting in a Federal share of \$11,635,000 and a non-Federal share of \$6,265,000. This is in addition to the cost of the Feasibility Study which was cost shared \$800,000 Federal and \$800,000 non-Federal. The annual operations, maintenance, repair, rehabilitation, and replacement (OMRR&R) costs are estimated at \$182,000. The City of Salina is responsible for OMRR&R of the constructed project. Conservation measures and Best Management Practices (BMPs) would be implemented during construction to minimize effects to identified Federally listed plants and animals.

The Kansas City District Engineer reviewed the significance of the resources, estimated habitat benefits, economic costs, identified risks and determined the implementation of the Recommended Plan, Alternative 3A, is in the Federal interest; therefore, the District Engineer recommends construction approval for the Recommended Plan.

In addition to a “no action” plan, three alternatives were evaluated. Alternative 2 includes sediment dredging in Reach 1 and establishment of a variable depth profile (including sequences of pools, riffles, runs, and glides), construction of a sediment forebay to minimize Old Channel sedimentation from Smoky Hill River flows, removal and replacement of the Western Star Mill Weir with five step-pools, installation of 2 weirs in the Old Channel (one upstream in Reach 1 and the other near the downstream end in Reach 2) to help manage water depth, the construction of wetland shelves in Reach 1 and the re-use of the dredged materials from the Old Channel to construct variable depth wetland habitat around Lakewood Lake. In addition to all of the measures in Alternative 2, Alternative 3 would include additional sediment dredging of Reach 2 and establishment of a variable depth profile (including sequences of pools, riffles, runs, and glides) along the full 6.8 miles of the Old Channel, and a greater range of wetland depth contours around Lakewood Lake. Alternative 4 includes all the same measures as Alternative 3, except the pools would be dredged deeper (5-7ft) in Reach 1. The wetland configuration of Alternative 4 is different, with more shallow water habitat and a different trail network.

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1:

Table 1: Summary of Potential Effects of the Recommended Plan

	Less than significant effects	Less than significant effects as a result of mitigation*	Resource unaffected by action
Air Quality and Noise	☒	☐	☐
Aquatic Habitat and Resources	☒	☐	☐
Climate	☐	☐	☒
Cultural and Historic Resources	☐	☒	☐
Fish and Wildlife	☒	☐	☐
Floodplains	☒	☐	☐
Geology, Soils and Prime Farmland	☐	☐	☒
Hazardous, Toxic & Radioactive Waste	☒	☐	☐
Hydrology and Hydraulics	☒	☐	☐
Infrastructure	☒	☐	☐
Land Use	☒	☐	☐
Recreation and Aesthetics	☒	☐	☐
Riparian Habitat	☒	☐	☐
Socioeconomics and Demographics	☐	☐	☒
Threatened and Endangered Species	☒	☐	☐
Water Quality	☒	☐	☐
Wetlands	☒	☐	☐

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the IFR/EA will be implemented, if appropriate, to minimize impacts. Proposed BMPs include erosion and silt prevention, such as using silt fencing and erosion barriers during construction, and actions to minimize dust, such as using fast growing ground cover on sediment storage areas, covering stockpiles, and minimizing vehicle idling. To avoid noise impacts to the surrounding residential communities, construction would occur at set times during working hours.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft IFR/EA and FONSI was completed on **DATE DRAFT EA AND FONSI REVIEW PERIOD ENDED**. All comments submitted during the public review period were responded to in the Final IFR/EA and FONSI.

A 30-day state and agency review of the Final IFR/EA was completed on **DATE SAR PERIOD ENDED**. **PICK OPTION BASED ON RESULTS OF STATE AND AGENCY REVIEW**.

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan may affect but is not likely to adversely affect the following federally listed species or their designated critical habitat:

Whooping Crane and monarch butterfly. The U.S. Fish and Wildlife Service (FWS) concurred with the Corps' determination on **DATE OF CONCURRENCE LETTER**

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties may be adversely affected by the recommended plan. The Corps, Kansas SHPO, City of Salina, Friends of the River, Smoky Hill Museum, the Certified Local Government of Salina, and the Pawnee Nation entered into a Programmatic Agreement (PA), dated **DATE OF AGREEMENT**. All terms and conditions resulting from the agreement shall be implemented in order to minimize adverse impacts to historic properties.

The project will be conducted under Nationwide Permit 27 (NWP 27), which provides for aquatic habitat restoration, enhancement and establishment activities. In accordance with Section 401 of the Clean Water Act, the State of Kansas has issued Section 401 Water Quality Certification for all NWPs, including NWP 27. The project would comply with NWP 27 requirements and State of Kansas regional permit conditions.

In a letter dated **DATE OF LETTER**, the KDHE stated that the recommended plan appears to meet the requirements of the water quality certification, pending confirmation based on information to be developed during the pre-construction engineering and design phase. All conditions of the water quality certification will be implemented in order to minimize adverse impacts to water quality.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

Technical, environmental, economic, and cost effectiveness criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, the reviews by other Federal, State and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date

Andrew T. Niewohner
Colonel, Corps of Engineers
District Commander