

RECORD OF DECISION
STORAGE REALLOCATION
JOHN REDMOND DAM and RESERVOIR, KANSAS

The Final Supplement to the Final Environmental Statement (FSFES), dated February 2013, provides the documentation supporting the request for the reallocation of water supply storage between the conservation and flood control pools at John Redmond Dam and Reservoir, Coffey County, Kansas. This action provides an equitable redistribution of remaining storage capacity depleted as a result of greater influx of sediment than originally expected, as well as uneven sediment accumulation and distribution. Based on the FSFES, the reviews of other Federal, State, and local agencies, input from the public, and the review by my staff, I find the plan to be technically feasible, in accordance with environmental statutes, and in the public interest. As such, I approve the storage reallocation for implementation.

The general reallocation of storage is authorized by Public Law 85-500, Water Supply Act of 1958. This action was included in Congressional Senate Report 106-58, which specifically directed the Corps to study raising the conservation pool at John Redmond Dam and Reservoir. The state of Kansas and the federal government entered into a water storage agreement in 1975 for 55.84-percent of the conservation pool, estimated at the time to provide for 34,900 acre-feet of water storage through the design life of the project (calendar year 2014). A second water storage agreement was executed in 1996 for an additional 20.34-percent of the conservation pool, estimated at the time to provide for 10,000 acre-feet of water storage through 2014. The water is provided to the Cottonwood and Neosho River Basins Water Assurance District Number 3 and the Wolf Creek Nuclear Generating Station. District Number 3 includes 21 municipal and industrial (M&I) water users. Water supply storage was to occur within the conservation pool when maintained at the surface elevation of 1039.0 feet. Based on results of sediment surveys, the Tulsa District Engineer has determined that the M&I water supply purpose served by the conservation pool has been impacted by unanticipated sediment distribution. Projections for year 2014 indicate that the conservation pool would contain only seven-percent of the remaining useable storage space. Since the sediment reserve at the project has been exhausted, the District has determined the appropriate adjustment to the remaining useable storage space in the project, in accordance with the terms of the water storage agreements.

The Draft SFES was completed in September 2002. Prior to filing of the FSFES, safety issues arose regarding the structural integrity of the levee protecting Hartford, Kansas, an appurtenant structure to John Redmond Dam. As such, raising the pool elevation could not be implemented until such time that the levee was repaired. The repairs to the levee were completed, certified, and the notice that the reconstructed levee would no longer restrict the operation of the project was issued by the Corps Dam Safety Officer by memorandum dated October 22, 2012. The FSFES was subsequently filed and circulated in February 2013.

The area subject to this action is the John Redmond Reservoir and Dam, including all licensed lands of the Flint Hills National Wildlife Refuge and the Otter Creek Wildlife area for a total of 29,800 acres, as well as approximately 190 river miles of the Neosho River downstream of the dam to Grand Lake O' the Cherokees in Oklahoma. John Redmond Reservoir contains two

types of storage separated into zones from top to bottom: flood control pool and conservation pool. The upper zone provides flood control storage and is reserved for floodwaters; it otherwise remains empty and is managed for agriculture, wildlife habitat, and recreation. The conservation pool provides storage for water supply, water quality, and space to contain sediment.

A range of alternatives was developed and screened to determine viable alternatives to carry forward for analysis. The result was four alternatives that were evaluated in the SFES: no action, dredge sediments from the conservation pool, raise the conservation pool by two feet incrementally, and raise the conservation pool by two feet in a single pool rise. Under the no action alternative, the dam and reservoir would be operated as they are currently with existing pool elevations and the ongoing sedimentation would continue to have adverse effects on water supply storage. This alternative provides the baseline to assess the environmental effects of other alternatives.

A second alternative would involve dredging sediments from the conservation pool to forego reallocating storage and raising the conservation pool elevation. Dredging would involve both removal of sediment from the conservation pool and storage of removed sediment. While this alternative was not selected for federal implementation owing to high costs and potential environmental concerns, dredging has the potential to provide benefits to both water supply users as well as the aquatic ecosystem of John Redmond Reservoir. Accordingly, the State of Kansas is currently considering the dredging option as a fully State-funded and implemented action separate from the proposed reallocation.

A third alternative would reallocate storage in the conservation pool by two feet in increments of 1-foot, then 0.5-foot, then another 0.5-foot. Increasing the pool elevation from 1039.0 feet to 1041.0 feet incrementally would achieve the water supply storage goal. However, incremental increases require more time and may not keep pace with the rates of sediment accumulation and distribution in the reservoir relative to a single pool level increase.

The preferred alternative and proposed action is to reallocate storage and raise the conservation pool by 2 feet in a single pool raise. Raising the water stored from elevation 1039.0 feet to 1041.0 feet would achieve the water supply storage goal consistent with the purpose and need for action.

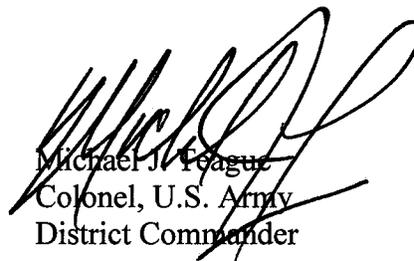
A two-foot conservation pool raise would inundate approximately 385 acres of the Flint Hills National Wildlife Refuge (Refuge) and 116 acres of the Otter Creek Wildlife Area managed by the Kansas Department of Wildlife and Parks. Physical structures and man-made improvements that would be affected include the Jacobs Creek Boat Launching Ramp and Parking Lot, the Strawn wetland dike and outlet works, and the Goose Bend #4 wetland dike and outlet works, all of which are located within the Refuge. The State of Kansas, as beneficiary of the reallocation, has compensated for this loss of structures and facilities through direct funding to the U. S. Fish and Wildlife Service (USFWS) to reconstruct dikes, outlet works, and pumping facilities, and replant riparian woodlands and wetland areas on the Refuge as identified by the USFWS. All such replacement measures agreed to between the State, the USFWS, and the Corps of Engineers through the National Environmental Policy Act (NEPA) process have been completed. As these

measures include simple replacement of facilities and continued management by the USFWS, no future monitoring is required.

The environmentally-preferred alternative is the proposed action to reallocate storage with an associated conservation pool increase from 1039.0 ft to 1041.0 ft in a single pool raise. All practical means to avoid or minimize environmental harm, to include completed replacement of facilities to be inundated by the conservation pool elevation increase, have been incorporated into the proposed action.

All applicable laws, executive orders, regulations, and guidelines were considered in the evaluation of alternatives and the selection of the recommended action. Based on the review of the reallocation report and FSFES, I approve the implementation of storage reallocation in a single conservation pool raise from elevation 1039.0 to 1041.0 ft as summarized above and detailed in the FSFES. This Record of Decision completes the National Environmental Policy Act process.

14 June 2013
Date


Michael J. Yeaguc
Colonel, U.S. Army
District Commander