



Description

The US Army Corps of Engineers (USACE), Kansas City District (NWK) will prepare and hold a workshop with the State of Kansas and federal agencies to problem-solve sedimentation issues at Milford Lake.



Figure 1. Milford Lake

Issue/Challenge To Address

Milford Lake, a large USACE reservoir in the Kansas River basin, is experiencing impacts from sediment accumulation such as storage loss and water quality impairment. The watershed and upstream channels yield 1000 to 1700 acre-ft per year of sediment, virtually all of which is trapped and deposited in the lake. Frequent toxic algae blooms exacerbated by sediment accumulation have made this lake a high priority for sediment management in the short term. In the long term, all of Milford Lake's missions, including flood control, navigation support, recreation, and water supply are impacted by sediment accumulation. Correspondingly, the downstream Kansas River is degrading and sediment-dependent aquatic species are suffering for a lack of sediment. Restoring sediment continuity to the system would benefit both the reservoir and the downstream channel.

Successes Lessons Learned

Lessons learned will be compiled during the duration of this study.

Expected Products

- "Databook" which compiles pertinent information (sediment volumes, hydrologic information, inlet and outlet works, etc.) into one location
- Preliminary screening of Regional Sediment Management (RSM) opportunities already generated for nearby Tuttle Creek Lake
- Documentation of workshop ideas and processes in a trade journal
- Presentation at the RSM IPR and to the National Reservoir Sustainability Team



US Army Corps
of Engineers®
Engineer Research and
Development Center

Regional Sediment Management Program Kansas City District (NWK): Milford Lake Sediment Management Workshop



Stakeholders/Users

Stakeholders include the Kansas Water Office, the Kansas Department of Health and Environment, the Kansas Department of Agriculture-Division of Water Resources, the Kansas Department of Wildlife, Parks, and Tourism. Federal invitees will include NWK Operations, Planning, Regulatory, and Engineering, EPA, Fish and Wildlife, and USGS.

Projected Benefits

Reservoir sedimentation is a pressing concern for the State of Kansas. The cost savings of managing sediments by passing them downstream rather than trapping them is an order of magnitude less expensive than traditional dredging with upland placement.

Leveraging Opportunities

This project leverages two previous NWK RSM projects (FY 2013 and FY 2015), Section 204 sediment management studies, and USGS, USDA-ARS, and State of Kansas sediment characterization and lake bathymetric surveys. Ideas from this workshop will be made available for inclusion in potential cost-shared projects with the State of Kansas. Our leveraging funds (Section 204) are no longer available for this type of work.

Points of Contact

John Shelley, NWK-EDHR
Sedimentation Expert
816-389-2310
John.shelley@usace.army.mil

Participating Partners

The Kansas Water Office is the main participating partner. See *Stakeholders/Users* for others.