



**US Army Corps
of Engineers®**
St. Louis District

St. Louis Sites Fact Sheet

COLDWATER CREEK SAMPLING



"Gateway to Excellence"

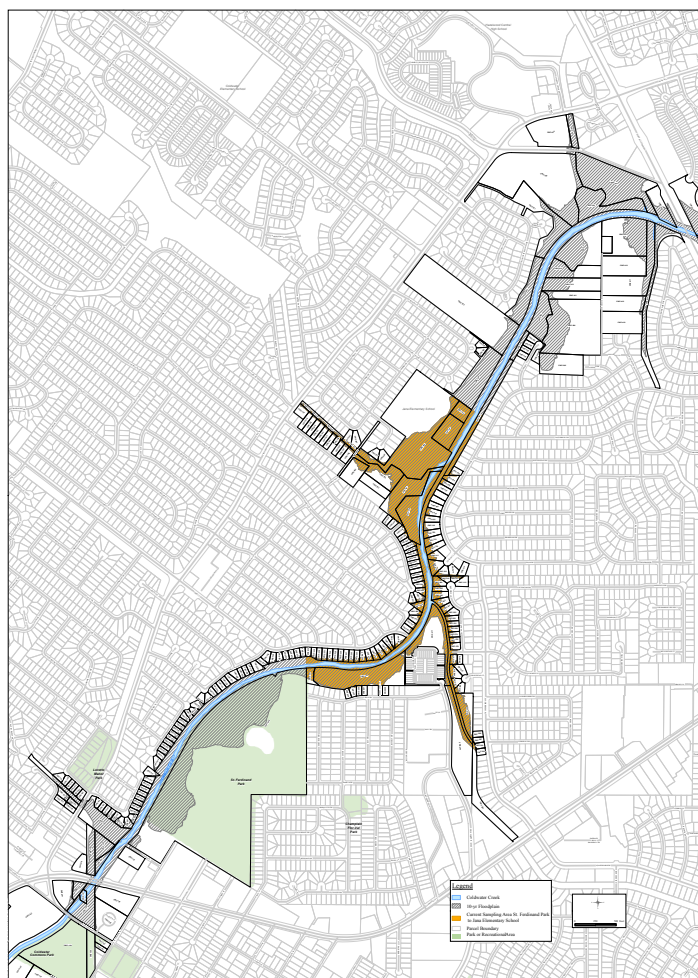
Cleanup activities at the St. Louis Sites are part of a nationwide U.S. Army Corps of Engineers (USACE) environmental program known as the Formerly Utilized Sites Remedial Action Program (FUSRAP). FUSRAP in St. Louis includes four Missouri sites (SLDS, SLAPS, Latty, and SLAPS VPs). These sites contain soils contaminated with radium, thorium, and uranium as a result of activities associated with the Manhattan Engineer District/Atomic Energy Commission (MED/AEC) during the nation's 1940s and 1950s atomic program. In 1946, the MED bought a 21.7-acre tract of land now known as the SLAPS to store residues and scrap from uranium processing at the Mallinckrodt facility in downtown St. Louis.

Surface-water transport from contaminated material at the SLAPS, the Latty Avenue Site, and haul roads adjacent to CWC was the main way for contamination to enter CWC. Once contamination reached CWC, creek flow transported the contaminated material downstream.

USACE first eliminated the sources of contamination at SLAPS and HISS. The selected remedy for the North St. Louis County Sites is excavation of contaminated soil to meet the remediation goals. The waste was shipped off-site for disposal at a permitted facility and remediation was completed in 2013.

To learn more about FUSRAP, contact the FUSRAP Project Office at 314-260-3905 or, via email, at STLFUSRAP@usace.army.mil.

Coldwater Creek (CWC) is a St. Louis Airport Site Vicinity Property (SLAPS VP). Coldwater Creek flows 14.2 miles in a northeasterly direction from Banshee Road along the western border of the St. Louis Airport Site (SLAPS) and the Hazelwood Interim Storage Site (HISS)/Futura, through the city of Hazelwood, the city of Florissant, unincorporated areas of St. Louis County, and along the northern edge of the community of Black Jack, until it discharges into the Missouri River. There are approximately 700 vicinity properties adjacent to CWC from Highway I-270 to the Missouri River that are also SLAPS VPs. These properties are designated Coldwater Creek VPs and are primarily residential and recreational properties with some businesses. USACE continues to investigate and sample the CWC corridor (banks and sediment) and the adjacent properties within the 10-year flood plain.



Coldwater Creek flows along the western border of SLAPS through the city of Hazelwood, the city of Florissant, unincorporated areas of St. Louis County, and along the northern edge of the community of Black Jack, until it discharges into the Missouri River.

Contamination entered CWC through storm/surface water run-off and flooding from SLAPS, HISS/Futura, and haul roads adjacent to CWC. Once contamination reached CWC, creek flow transported the contaminated material downstream. USACE completed remedial activities at the source sites (SLAPS in 2007 and HISS/Futura sites in 2013).

CURRENT STATUS OF INVESTIGATION

USACE continues to investigate and sample the CWC corridor (banks and sediment) and the adjacent properties within the 10-year flood plain. To date, the investigation has progressed approximately 3.6 creek miles downstream from I-270/Pershall Road to the Jana Elementary School property.

More than 380 properties in the 10-year flood plain are included in the investigation conducted thus far. More than 12,000 samples have been collected from the CWC Corridor and flood plain properties. Official documents have been completed to release 67 properties. USACE issues these documents to property owners as they are completed. In addition, USACE issued status letters in the spring of 2018 to property owners where sampling is complete but the official document for release was not completed.

The CWC investigation identified contaminated soil within portions of the CWC Corridor and some flood plain properties (e.g., St. Cin Park, Duchesne Park, four backyards on Palm Drive, Chez Paree property, St. Ferdinand Cemetery and Metropolitan Sewer District property). Remedial activities have been completed at St. Cin Park, Duchesne Park, the Chez Paree property, and the Palm Drive properties. Surveys using sensitive radiation-detection instruments on structures, such as buildings, pavement, concrete within the CWC Corridor and flood-plain properties have not identified contamination.

An environmental monitoring program was implemented at the St. Louis Sites beginning in calendar year 1998. Ground water, air, surface water and sediment are all analyzed as part of the Environmental Monitoring Program, and the data collected are presented annually in an the North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Report. Currently, there are eight monitoring stations along Coldwater Creek where both surface water and sediment samples are collected.

WATER AND SEDIMENT COLLECTED IN COLDWATER CREEK TODAY SHOWS THAT POLLUTION PREVENTION METHODS USED DURING REMEDIATION ACTIVITIES ARE WORKING TO PREVENT DEGRADATION OF THE CREEK.

Typically, field work anywhere in SLAPS VPs begins with a radiological walkover survey. A sodium iodide detector is used to identify possible areas of contamination and sampling locations. Soil and sediment samples are collected for lab analysis in accordance with the sampling plan. The samples are collected from surface areas to the target depths deemed appropriate for that specific location. The samples are then sent to the on-site FUSRAP lab for identification and quantitative analysis. USACE on-site radiochemical lab is nationally accredited by the Department of Defense Environmental Laboratory Accreditation Program.

If the data shows contamination, further sampling is conducted to bound and define the contaminated area. If contamination is found on a homeowner's property adjacent to the creek, USACE personally notifies the owner to discuss results of the data. From there, USACE works directly with the owner at every step before, during, and after remediation to ensure the homeowner understands each step taken to remediate the property. After the remediation is completed, a Post Remedial Action Report/Final Status Survey Evaluation PRAR/FSSE) is published. This document outlines each step that was taken to sample and remediate the property. The PRAR/FSSE also contains all the sampling data, survey data, and risk and dose estimates. The document is sent to the property owner.