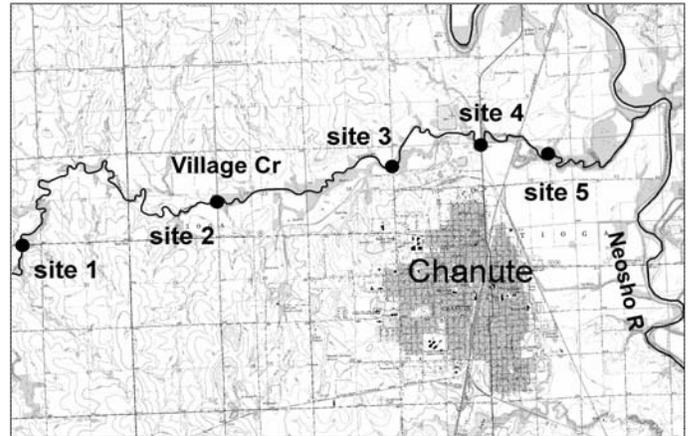


VILLAGE CREEK'S ENVIRONMENTAL SAMPLE RESULTS

The United States Environmental Protection Agency (EPA) and the Kansas Department of Health and Environment (KDHE) have completed a joint screening-level study to determine concentrations of selected contaminants in Village Creek's surface water, sediment and fish tissue. This study was an outcome of several previously held public meetings that began in 2010. This study was in direct response to community concerns about possible environmental and public health-related impacts. On July 6, 2011, the environmental samples were gathered by KDHE from five locations along Village Creek. The results are presented below:



- (1) Surface water samples were collected and analyzed by KDHE for all parameters typically considered in the department's ambient surface water chemistry program. KDHE found no measureable contaminant concentrations that exceeded the Kansas surface water quality criteria. However, concentrations of aluminum, iron, and manganese generally exceeded secondary national drinking water criteria, which is a nonregulatory guideline for contaminants that may cause nuisance problems such as taste, odor or staining for drinking water. KDHE does not believe there are significant human health concerns for these contaminants. KDHE also measured low concentrations of the herbicides atrazine and metolachlor in nearly all water samples. These were low concentrations and KDHE does not believe there are significant health concerns for these contaminants.
- (2) Streambed sediment samples from Village Creek were collected by KDHE and analyzed by EPA for a select group of pesticides, polychlorinated biphenyls (PCBs) and heavy metals. Analytical results for the sediment samples exhibited no contaminants present in quantifiable concentrations for pesticides and PCBs. In contrast, mercury and lead concentrations were present in nearly all the samples, but in no case did these levels approach or exceed the probable effects concentrations (PECs). The PEC is a nonregulatory limit for contaminants in sediment above which harmful effects on sediment dwelling organisms can occur. Cadmium concentrations were present in all the samples with the PEC being exceeded in a single sediment sample, collected from the uppermost sampling site.
- (3) Fish were collected by KDHE from each of the monitoring sites and submitted to EPA for fillet tissue analysis. Collected species included largemouth bass, white crappie, and freshwater drum (i.e., predatory forms) and common carp, smallmouth buffalo, and river carpsucker (i.e., bottom-feeding forms). Concentrations of mercury in all six predatory fish samples exceeded KDHE's 0.23 mg/Kg consumption advisory threshold. Three of five bottom feeder samples exceeded the consumption advisory threshold. Overall, these results indicate a safe consumption level of two meals/month for predatory fish and four meals/month for bottom feeders. KDHE fish advisories are normally based on three years of sampling. However, the number of samples analyzed during this study (11) and the consistency of the results suggest a consumption advisory for Village Creek may be warranted. KDHE will perform follow-up fish tissue sampling for a minimum of two years

and then re-evaluate the fish consumption advisory. Additionally, two fish samples contained low levels of the pesticide chlordane and/or nonachlor.

Please see the links below for additional information regarding the Village Creek environmental sample results, mercury concentrations in fish tissue for Kansas, and the KDHE Fish Tissue Contaminant Monitoring Program.

[*Click here to view the summary tables for the contaminants detected at the Village Creek sampling effort.*](#)

[*Click here to view the mercury in fish tissue data for Kansas.*](#)

[*Click here to view the KDHE Fish Tissue Contaminant Monitoring Program webpage.*](#)