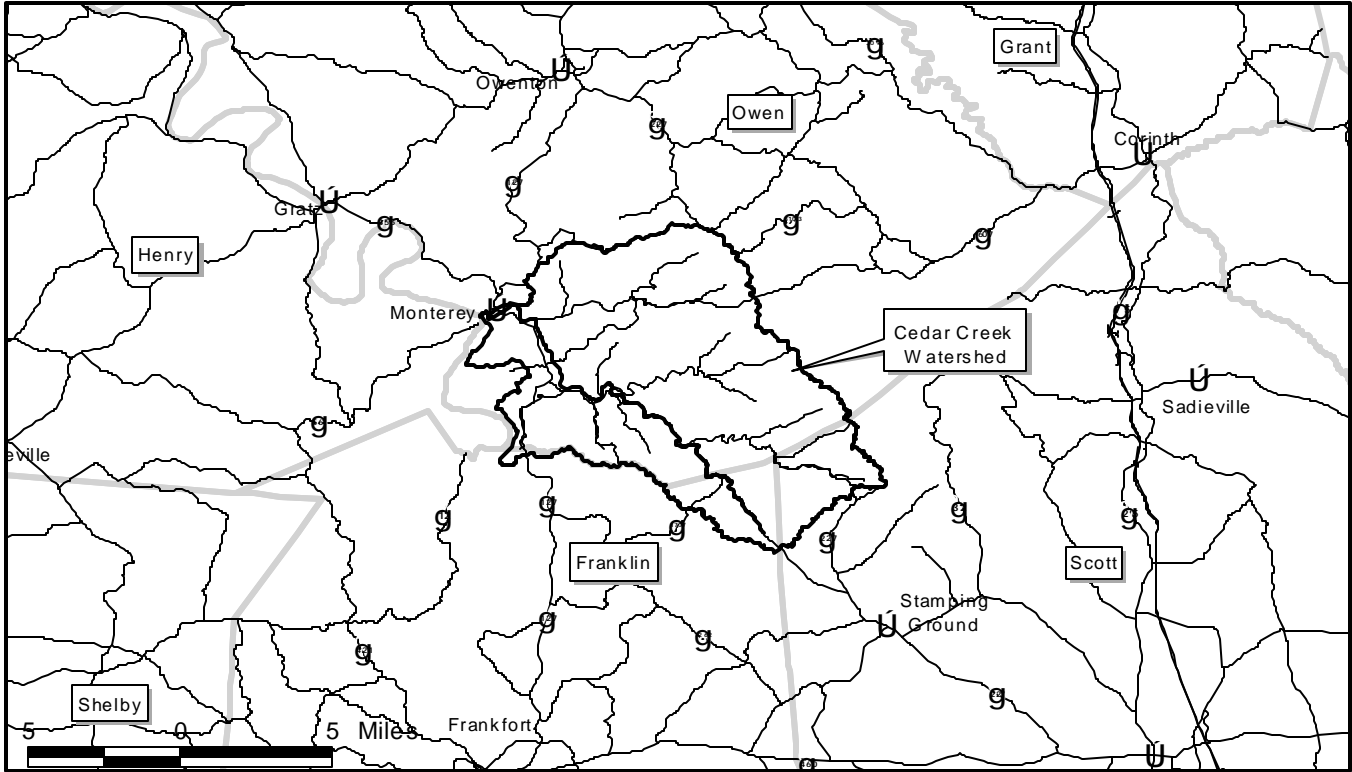


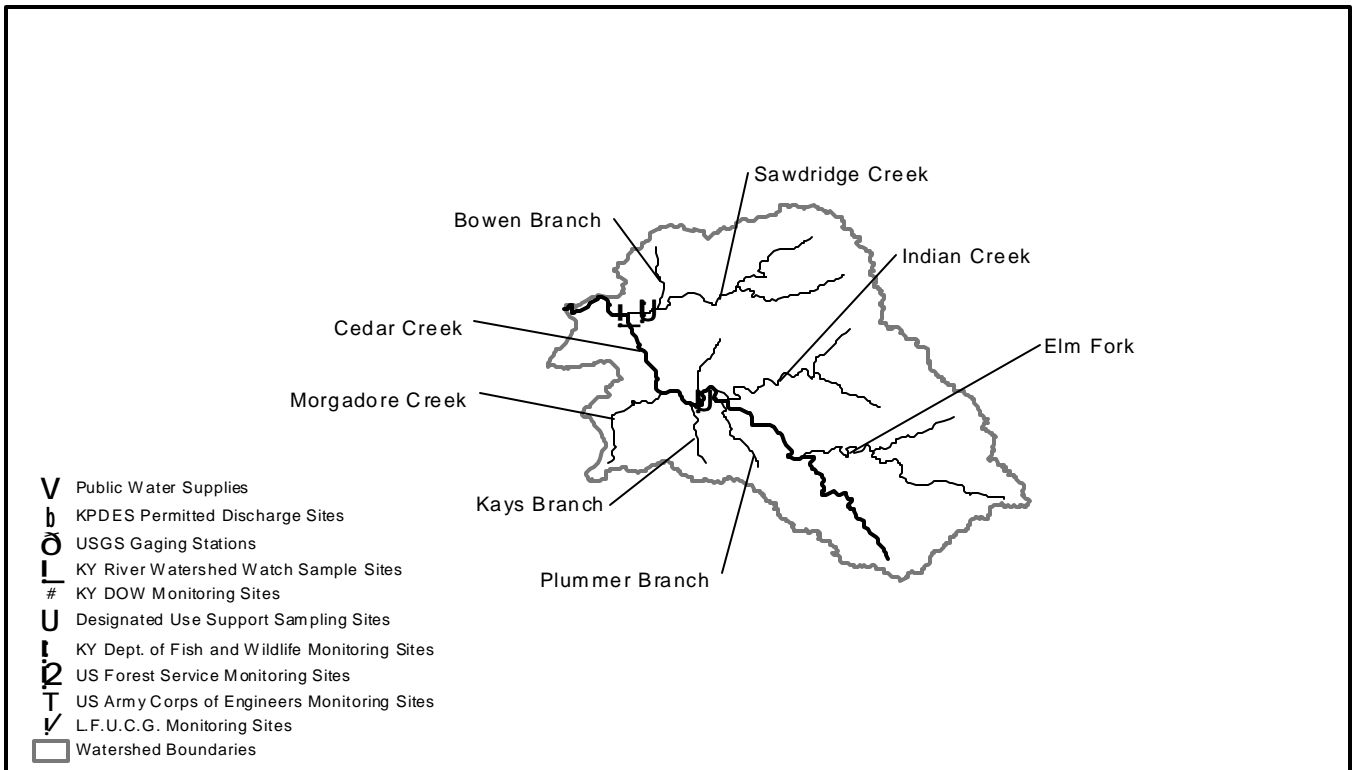
Cedar Creek Watershed

Watershed Number: 05100205310

Location Map



Watershed Features



Geography. The Cedar Creek watershed covers southern Owen County. The land is in the hills of the bluegrass subregion of the Bluegrass physiographic region, characterized by hilly terrain, very rapid surface runoff, and slow groundwater drainage. The watershed lies over interbedded limestones and shales (>20% limestone, allowing groundwater flow where the clay content is low enough).

Waterways. Cedar Creek empties into the Kentucky River at Monterey, just below Lock and Dam Number 3. Among the creeks that feed it are Hall Branch, Elm Fork, Plummer Branch, Kays Branch, Indian Creek, McDowell Branch, Elk Lick Creek, Morgadore Creek, Bowen Branch, and Sawdridge Creek.

Land and water use. Land in the watershed is almost two-thirds agricultural and about one-third rural and wooded. No businesses or organizations hold permits for discharges into the creeks. See tables for details.

Agency data assessment. The assessed segments of Cedar Creek and Sawdridge Creek in this watershed only partially support their designated uses, based on biological and/or water-quality data. Organic enrichment, siltation, and alteration of stream banks, streamside vegetation, and other aspects of the habitat contribute to the impairment of these streams. See tables for details.

Watershed rankings. The ranking formula provides a preliminary ranking by synthesizing a broad spectrum of watershed characteristics, current conditions, and threats. This watershed ranks in the group with a moderate need for protection and/or restoration. This rating is for the watershed on average: particular sites and particular waters within the watershed may vary widely. See tables for details.

Volunteer data. No volunteer data were collected in this watershed in 1999.

This report was prepared by the Kentucky Water Research Institute as a product of the statewide Kentucky Watershed Management process. Information presented in this report was collected from many sources. Reasonable attempts were made to ensure that information and figures are as accurate as possible, but no representation or guarantee is made as to either the correctness or suitability of information for particular purposes. All critical information should be independently verified. Please address questions or corrections to Basin Coordinator, KWRI, Rm. 233 Mining and Minerals Resources Building, University of Kentucky, Lexington, Kentucky 40506-0107.

Summary of Basin Characteristics and Facilities

General Land-use Characteristics:

Total Land Area (Acres):	41,258	Acres	% of Total		
Residential Area:	548		1.3	Number of Mine Permits:	0
Commercial Area:	0		0.0	Total Permitted Mining Area (Acres):	0
Industrial Area:	0		0.0	Number of Identified Wetland Areas:	5
Agricultural Area:	14,165		34.3	Total Wetland Area (Acres):	1
Rural and Wooded Area:	26,548		64.3		
Other Land-use Area:	0		0.0		

Withdrawal and Discharge Sites:

Number of Public Water Supplies and Water Withdrawal Sites:	0	Number of KPDES Discharge Permits:	0
Surface Water Withdrawals:	0		
Groundwater Withdrawals:	0		
No. of Potable Water Treatment Facilities:	0		

Sampling Site Statistics:

Number of USGS Gaging Stations:	0
Number of Kentucky Division of Water Sampling Sites:	0
Number of Kentucky Dept. of Fish and Wildlife Sampling Sites:	2
Number of US Forest Service Sampling Sites:	0
Number of US Army Corps of Engineers Sampling Sites:	0
Number of Kentucky River Watershed Watch Sampling Sites:	1
Number of Lexington-Fayette Urban Co. Gov. Sampling Sites:	0

Watershed Name:

Cedar Creek

11-Digit Watershed Identity Number:

05100205310

Watershed Indicators and Ranking Categories:

Overall Watershed Ranking:

Protection Ranking

Observed Impacts

Potential Impacts

Restoration Ranking

Medium

Low

Medium

Medium

Medium

Protection Categories:

Indicator	Value	Units	Range of All Watersheds	Mean of All Watersheds
Wetland Areas	1	Acres	0 - 106	12
Surface Drinking Water Sources	0	No. of sources	0 - 14	2
Ground Drinking Water Sources	0	No. of sources	0 - 17	1
Groundwater Sensitivity	2.42	Score	2 - 5	3.21
KY Dept. of Fish and Wildlife Management Areas	0	Acres	0 - 2951	93
U.S. Forest Service Management Areas	0	Acres	0 - 155253	12,600
Kentucky State Park Areas	0	Acres	0 - 1928	42
Nature Preserves Commission Areas	0	Acres	0 - 1430	32
Nature Conservancy Areas	0	Acres	0 - 2473	28
Reference Reach Watersheds	0.00	Score	0 - 100	3.08
Outstanding Resource Watersheds	0.00	Score	0 - 0	0.00
Recognized Stream Resources	0	No. of resources	0 - 8	1
Kentucky Rivers Assessment Scores	0.67	Score	0 - 11	1.80

Observed Impact Categories:

Human Health Impact Categories:

Indicator	Value	Units	Range of All Watersheds	Mean of All Watersheds
Flood Declarations	2	Number since 1970	0 - 10	4
Water Supply Inadequacy	0.00	Score	0 - 2	0.22
Observed Impacts to Surface Drinking Water	1.00	Score	1 - 1	1.00
Observed Impacts to Fish Consumption	1.00	Score	1 - 1	1.00
Observed Impacts to Primary Water Contact	1.00	Score	1 - 3	1.33
Contamination Sites Impacting Human Health	2	Number of sites	0 - 71	4

Ecological Health Impact Categories:

Indicator	Value	Units	Range of All Watersheds	Mean of All Watersheds
Observed Impacts to Aquatic Life	2.00	Score	1 - 3	1.31
Contamination Sites Impacting Ecological Health	2	Number of sites	0 - 71	4

Potential Impact Categories:

Indicator	Value	Units	Range of All Watersheds	Mean of All Watersheds
Potential Contamination Sites	5	Number of sites	1 - 121	12
Potential Pesticide Loading	11	Est. sales in tons	0 - 45	10
Potential Fertilizer Loading	390	Est. tons applied	0 - 2747	394
Agricultural Erosion Potential	4.86	Est. tons erosion / acre	0 - 9	3.20
Livestock Operations Potential Impact	7,180	Animal units	55 - 43826	7,021
KPDES Discharge Violations	0	Number of violations	0 - 541	39
KY Division of Water Citizen Complaints	7	Number of complaints	0 - 53	9
Toxic Release Inventory	0	Score	0 - 11547626	231,638
Population Change Projection	50	Number of persons	-149 - 11030	448
Population Not on Public Sewer Systems	603	Number of persons	12 - 4511	1,114
Mining Area	0	Acres	0 - 6305	355
Surface Water Runoff Potential	74.28	SCS Curve Number	60 - 79	68
KPDES Permitted Discharges	0	Number of sites	0 - 56	6

Stream and Waterbody Use Support Summary

Total Stream Miles: <input type="text" value="51.58"/>	<i>Number of Segments</i>	<i>Stream Miles Assessed</i>	<i>Miles * Fully Supportina</i>	<i>Miles * Partially Supportina</i>	<i>Miles * Not Supportina</i>	<i>Miles * Threatened</i>
Segments Assessed:	2	7.7	0.0	7.7	0.0	0.0
Designated Uses						
Aquatic Life:	2	7.7	0.0	7.7	0.0	0.0
Primary Contact:						
Fish Consumption:						
Drinking Water:						

* Blank values indicate no assessed segments for this category.

Assessed Stream Segments and Waterbodies					
<i>Stream or Waterbody Name *</i>	<i>Starting Milepoint</i>	<i>Ending Milepoint</i>	<i>Segment Length (miles)</i>	<i>Designated Uses *</i>	<i>Overall Level of Support</i>
Cedar Creek	2.2	6.7	4.5	AL	Partially Supporting
Sawdridge Creek	0	3.2	3.2	AL	Partially Supporting

**Abbreviations: AL - Aquatic Life Support, PC - Primary Contact Recreation, SC - Secondary Contact Recreation, FC - Fish Consumption, DW - Drinking Water Supply, UT - Unnamed Tributary*

Causes for Nonsupport or Impairment of Designated Uses					
<i>Stream or Waterbody Name *</i>	<i>Starting Milepoint</i>	<i>Ending Milepoint</i>	<i>Segment Length (miles)</i>	<i>Impaired or Threatened Designated Use</i>	<i>Level of Support</i>
Cedar Creek	2.2	6.7	4.5	Aquatic Life Support	Partially Supporting
Possible Causes of Impairment: Organic enrichment/Low DO, Other habitat alterations, Siltation			Possible Sources For Impairment: Agriculture, Bank or Shoreline Modification/Destabilization, Construction, Habitat Modification (other than Hydromodification), Highway/Road/Bridge Construction, Removal of Riparian Vegetation		
Sawdridge Creek	0	3.2	3.2	Aquatic Life Support	Partially Supporting
Possible Causes of Impairment: Organic enrichment/Low DO, Other habitat alterations, Siltation			Possible Sources For Impairment: Agriculture, Habitat Modification (other than Hydromodification)		

**Abbreviations: UT - Unnamed Tributary*

Watershed Name: Cedar Creek

11-Digit Watershed Identity Number: 05100205310

Withdrawal Sites and Discharge Facilities:

Gaging Stations and Sampling Sites:

<i>KY Dept of Fish and Wildlife Sampling / Assessment Sites</i>					
<i>Stream Segment</i>	<i>Upstream Description</i>	<i>Downstream Description</i>	<i>Total Length of Segment</i>	<i>Upstream Mile Point</i>	<i>Downstream Mile Point</i>
Cedar Creek	Indian Creek	Sawdridge Creek	15.1	6.7	2.2
Sawdridge Creek	Elk Lick	Mouth	6.7	3.2	0

<i>KY River Watershed Watch Sampling Sites</i>		
<i>Stream Name</i>	<i>KRWW Sample ID No.</i>	<i>Site Description</i>
Cedar Creek	K79	Cedar Creek below Sawbridge Creek