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U.S. ENVIRONMENTAL PROTECTION AGENCY



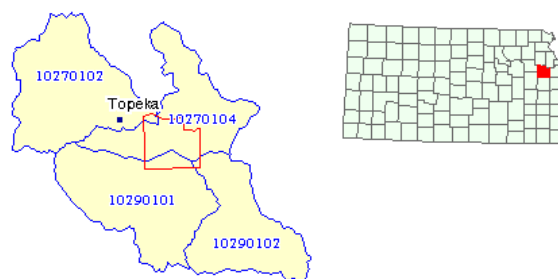
Surf Your Watershed

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Douglas County

Douglas County, KS



[Current Population](#) (2000 U.S., county) [EXIT Disclaimer](#)

This county crosses 4 [watersheds](#).

Find environmental information for each of these watersheds:

- [10270102](#) Middle Kansas; state(s): KS
- [10270104](#) Lower Kansas; state(s): KS, MO
- [10290101](#) Upper Marais Des Cygnes; state(s): KS
- [10290102](#) Lower Marais Des Cygnes; state(s): KS, MO

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Last updated on Thursday, November 13th, 2008

**"Science
in Your
Watershed"**

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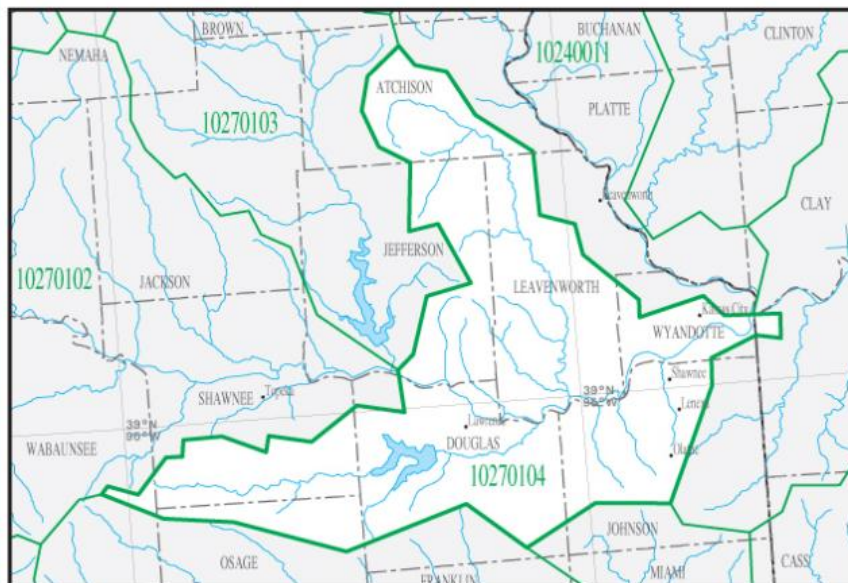
KNOW

Watershed
Information Network **SURF**

SCIENCE

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Science in Your Watershed



[Additional Information for this Watershed](#)

USGS Water

Surf Your Watershed

Know Your Watershed

[HELP!](#)

Lower Kansas -- Cataloging Unit 10270104

This HUC is part of the:

- Kansas Accounting Unit [102701](#)
- Kansas Subregion [1027](#)
- Missouri Region [10](#) (There are 310 cataloging units in this region.)
The state composition by area is 99.9% Kansas, 0.1% Missouri.

I. Graphical Locator Maps

Roads	Water Only	8 Digit HUCs
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The area of this HUC in these maps is 4296.0 km² (1659.4 mi²) [% in USA = 69.40, % in Region = 61.29]
The area from the USGS is 1640 mi².

II. [Flow Connections](#) (upstream and downstream units)

III. [Named places in this watershed](#) (total = 1095)

IV. Elevation Analysis

This analysis is based on 1716134 elevations on a 50 m grid within the area of this HUC.

The mean elevation is 301.2 m (988.2 ft) [% in USA = 38.89, % in Region = 6.45]

The elevation standard deviation is 32.2 m (105.6 ft) [% in USA = 24.02, % in Region = 9.35]

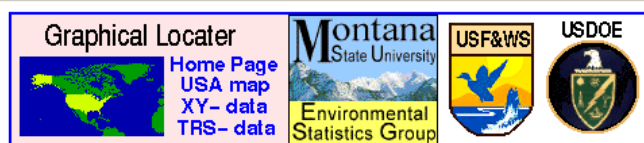
The coefficient of variation is 10.7 %.

The vertical relief is 206.0 m (675.8 ft) [% in USA = 29.80, % in Region = 17.74]

Elevation Percentiles

	0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
meters	219.0	257.9	274.0	279.6	298.5	304.0	305.5	319.0	334.4	336.5	425.0
feet	718.5	846.1	898.9	917.3	979.3	997.4	1002.3	1046.6	1097.1	1104.0	1394.3





The selected location is:

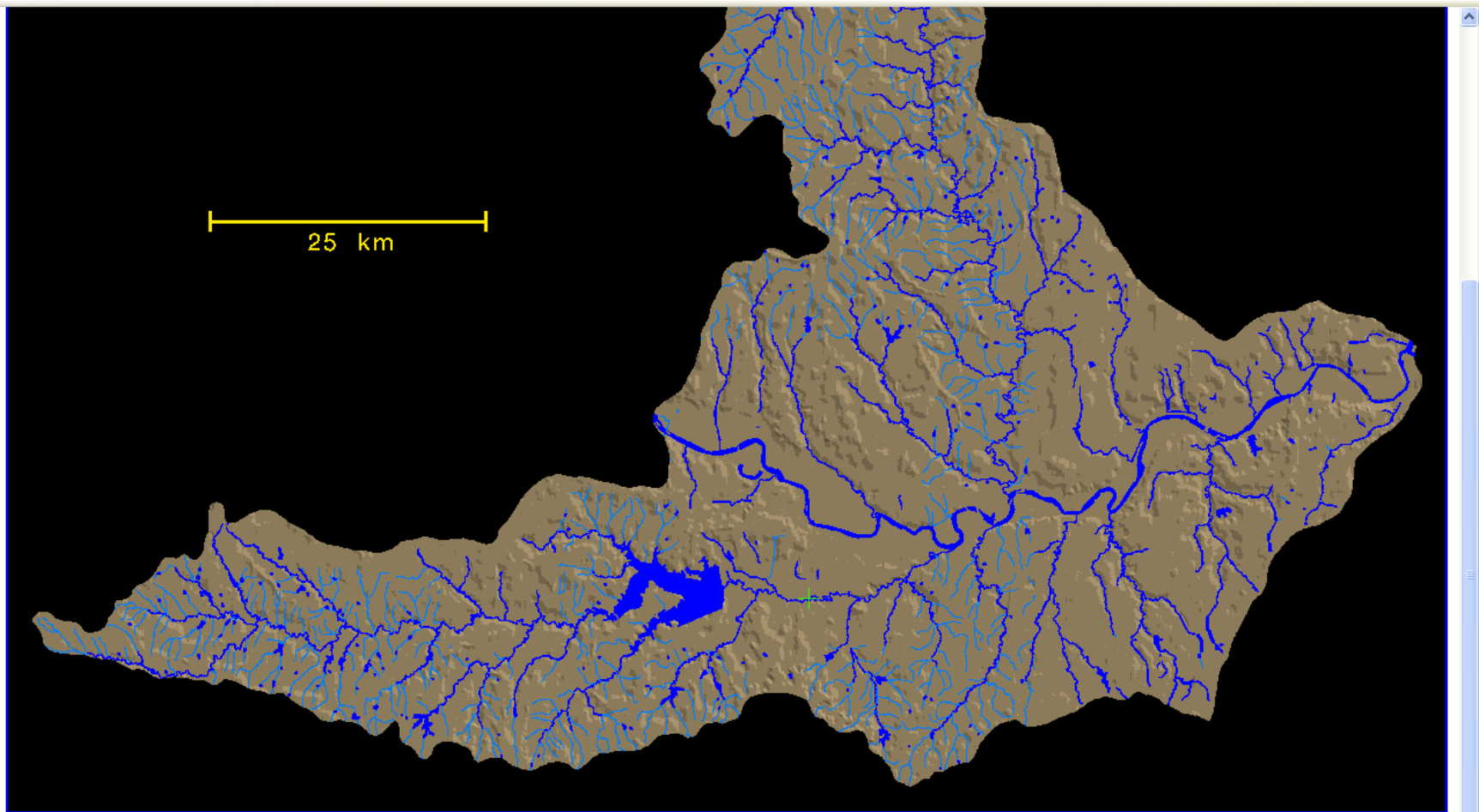
Latitude/Longitude 38.9139°N, 95.2372°W (38°, 54', 50.0" N; 95°, 14', 13.9" W)
The legal description is: Kansas, Sixth Principal Meridian T13S,R20E,sec18
UTM zone 15 (X,Y) 306032 , 4309601

The elevation is 245 m (805 ft)
The gradient is: 3.0 percent
The aspect direction is: 102.0 degrees or E
The local roughness is: 2.9 or average
The location as decimal degrees (X,Y,Z) = -95.2372, 38.9139; 245 m

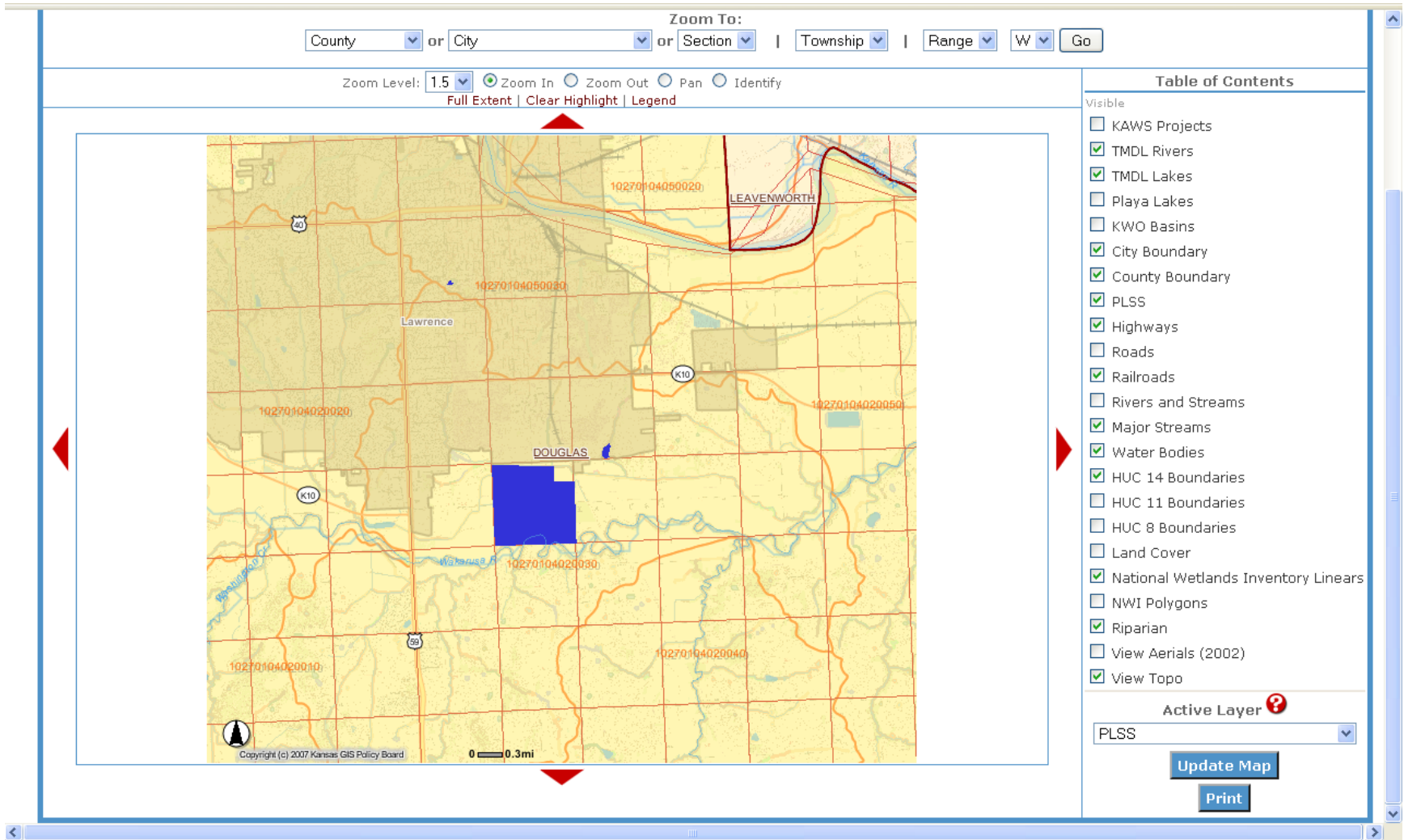
The state and county are Kansas: Douglas County 20045
The HUC is Lower Kansas [10270104](#); [Place point in HUC](#)
The Omernik ecoregion is Central Irregular Plains (more typical) 40
[The 1:100,000 map \(if available\)](#); [Switch to TerraServer](#)
Zoom on that location with radius = [2 km](#); [5 km](#); [10 km](#); [20 km](#); [30 km](#); [custom](#).

Nearby named places (in order by distance)

1. Wakarusa Crossing, Kansas: Douglas Co. [-95.2372, 38.9139](#), (805 ft) at a distance of 4 m
2. Blanton (historical), Kansas: Douglas Co. [-95.2420, 38.8986](#) at a distance of 1747 m
3. Broken Arrow Park, Kansas: Douglas Co. [-95.2392, 38.9308](#), (830 ft) at a distance of 1885 m
4. Haskell Indian Junior College, Kansas: Douglas Co. [-95.2325, 38.9378](#) at a distance of 2686 m
5. University Center, Kansas: Douglas Co. [-95.2606, 38.9311](#) at a distance of 2784 m
6. Wakarusa, Township of, Kansas: Douglas Co. [-95.2559, 38.9361](#) at a distance of 2948 m
7. Yankee Tank Creek mouth, Kansas: Douglas Co. [-95.2721, 38.9189](#) at a distance of 3082 m
8. Pleasant Valley School, Kansas: Douglas Co. [-95.2674, 38.8989](#) at a distance of 3107 m
9. The Malls Shopping Center, Kansas: Douglas Co. [-95.2432, 38.9417](#), (870 ft) at a distance of 3131 m
10. KLWN-AM, Kansas: Douglas Co. [-95.2659, 38.9311](#) at a distance of 3134 m



This was request number 48452
dlg@rapid.msu.montana.edu



WEPP Software

Water Erosion Prediction Project

The Water Erosion Prediction Project (WEPP) model is a process-based, distributed parameter, continuous simulation, erosion prediction model for use on personal computers running Windows 95/98/NT/2000/XP/Vista. The current model version (v2008.907) available for download is applicable to hillslope erosion processes (sheet and rill erosion), as well as simulation of the hydrologic and erosion processes on small watersheds. Included in the download package is the WEPP model (version 2008.907), WEPP Windows interface (October 2008), CLIGEN climate generators (versions 4.3 and 5.22564), documentation and example data.

<p>Documentation</p> <p>Overview of Soil Erosion WEPP Model v2008.907 Release Notes WEPP Model Documentation WEPP Publications Bibliography List Agricultural Research magazine article on WEPP WEPP Windows Frequently Asked Questions WEPP Windows Interface Tutorial</p>	<p>Downloads</p> <p>Download WEPP for Windows (October 2008)</p> <p>Previous versions of the model are also available from the download page.</p> <p>Windows Vista Install Notes.</p>
<p>Soil Data</p> <p>Soil parameter inputs for WEPP are based on 1992 SOILS-5 data. The install package includes soil archive files for each state. These archives can be used with the WEPP Windows Interface by selecting the Tools menu and then Soil Archive Program.</p>	<p>Climate Data</p> <p>Example CLIGEN breakpoint data file Breakpoint Climate Generator CLIGEN Information Using Climate data in WEPP Windows</p> <p>Cligen parameter files for about 2600 stations in the US are included in the install package.</p>

Management Data

Example managements for agriculture, rangeland and forest are included in the install package.

Upcoming WEPP Workshops

Related Software

[A Web browser interface to WEPP model.](#) Run WEPP simulations without having to download the software, simulations are run on servers at the NSERL.

[Forest Service WEPP interfaces.](#) The US Forest Service has developed specific web based interfaces for western forest and logging activities.

[A prototype GIS interface](#) is available for evaluation. This is an ESRI ArcView extension that uses DEM data to derive topography inputs for WEPP.

[DOS Interface file builders for WEPP.](#) This software is no longer being updated but is available for download.

[WEPP Validation Data Sets.](#) For use with WEPP model (without interface), for hillslope and watershed.

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Comments or suggestions regarding WEPP: e-mail wepp@ecn.purdue.edu

- [Forests in the News : January 15-31, 2008](#) New tree species found in Madagascar, *Kansas City Star* ... GIS scientist wins soil conservation award - Renschler's *GeoWEPP* is used widely by scientists ... www.fseee.org/fsnews/080101news.shtml - [Cached](#) - [Similar pages](#)
- [Program](#) If you wish to run *GeoWEPP* (A GIS based model that uses DEM's) bring your computer. Topeka, *Kansas*; Richard Straight, USDA National Agroforestry Center; www.swcs.org/en/conferences/past_conferences/2002_annual_conference/program/ - [Cached](#) - [Similar pages](#)

WEPP Registration For Download

Water Erosion Prediction Project

You may want to provide us with some information about how you will be applying the model. This information is used to better understand the range of applications, landuse and climate conditions being simulated.

If you prefer not to register you can still download the software by clicking on the link below:

- [Continue to download WEPP \(skip registration\)](#)

<i>Your Name</i>	<input type="text"/>
<i>Organization</i>	<input type="text"/>
<i>Reason for using WEPP</i>	<input type="text"/>
<i>Country/Region</i>	<input type="text"/>

Comments or suggestions e-mail wepp@ecn.purdue.edu

- WEPP Model Version 2008.907 (September 2008)
- Windows Interface (October 2008)
- CLIGEN version 4.3 and 5.22564 with **climate data** for 2600 US stations.
- WEPP soil archives for US with data for about 20000 WEPP soils.
- Sample crops, operations, managements
- Forest land-use management files.
- Compatible with GeoWEPP.

[Click here to download WEPP](#)

(Programs with example data. Full soil and climate datasets)

After downloading double-click on the weppwin09-2008.exe file icon to begin the installation.

WEPP Web Interface

The Water Erosion Prediction Project (WEPP) is a computer simulation that predicts soil erosion. The WEPP erosion model is applicable at the field scale using input from the following areas:

Climate	Includes rainfall amounts, intensity, temperature.
Management	What management practices are done on the field including crops grown and soil disturbance operations.
Soil	Soil properties
Topography	Slope description including length, steepness of different sections, width, orientation

To begin using the WEPP model click on one of the links below.

<u>Basic Hillslope Profile</u>	Run a single landuse, single soil WEPP hillslope simulation
<u>Hillslope with Filter Strip at Bottom</u>	Add a different landuse area at the bottom of a hillslope
<u>Strip Cropping</u>	Use alternating crops down a hillslope
<u>Worksheet</u>	Run multiple simulations to see effects of landuse changes.
<u>WEPP GIS</u>	Run a WEPP watershed simulation using digital elevation data. Very preliminary.

Disclaimer: All Information, computer software, and databases contained on the accompanying web pages are for evaluation only and are not fully tested.

