

APPENDIX ONE

EPA'S NINE KEY ELEMENTS FOR STATE NPS MANAGEMENT PROGRAM

1. Provide explicit short and long term goals and strategies.
2. Provide strong collaborative partnerships among state, federal, local, tribal and the private sector.
3. Provide a balanced approach that emphasizes both statewide and watershed efforts.
4. Abate known water quality impairments and prevents pollution of unimpaired waters.
5. Identify impaired and threatened waters and establishes a process to progressively address these.
6. Address all components required by Section 319 of the Clean Water Act and expeditiously restore and protect water resources.
7. Identify Federal lands and activities which are not managed consistently with state nonpoint source program objectives.
8. Provide efficient and effective management and implementation of state program, including financial management.
9. Review, evaluate and update nonpoint source assessment and management program at least every five years.

APPENDIX TWO STATE WATER QUALITY ASSESSMENTS

KANSAS INTEGRATED WATER QUALITY ASSESSMENT 2010

EXECUTIVE SUMMARY

This report, the Kansas Integrated Water Quality Assessment (2010), was prepared by the Kansas Department of Health and Environment (KDHE) in response to water quality reporting requirements contained in sections 303(d), 305(b), and 314(a) of the federal Clean Water Act (CWA). Section 303(d) calls for the development of a list of waterbodies currently failing to meet established water quality standards, whereas sections 305(b) and 314(a) require information concerning the overall status of the state's surface waters and the programs responsible for water quality monitoring and pollution abatement.

The Kansas 2010 list of impaired waters (*i.e.*, 303(d) list) was included as an appendix to this report and posted, in its entirety, at <http://www.kdheks.gov/tmdl/methodology.htm>. This list was based primarily on data collected by the KDHE stream chemistry, stream biological, and lake and wetland monitoring programs and secondarily on information obtained from outside sources. Watersheds containing stream chemistry and/or stream biological monitoring stations represented the assessment units for flowing waters. Monitored lakes and wetlands represented the assessment units for standing waterbodies. In all, 537 water quality impairments were identified by KDHE and assigned a high priority for Total Maximum Daily Load (TMDL) development. The 303(d) list also identified waterbodies previously given a high priority but subsequently assigned to other prioritization categories.

Requirements related to section 305(b) were addressed, in large part, using data obtained through a stream monitoring program implemented in 2006. This program employed a probabilistic survey design to estimate the stream mileage failing to support the uses recognized in section 101(a) of the CWA (aquatic life support, food procurement, and recreation). The program's targeted sampling population included all classified streams that contained water during the summer low-flow periods of 2006–2008. Owing primarily to the occurrence of a severe drought that extended into 2006, only about 69% of the state's classified stream mileage was represented in the sampling population.

Monitoring data obtained during this reporting cycle indicated that 29% (19–39%) of the state's designated stream mileage fully supported all section 101(a) uses, whereas 71% (61–81%) was impaired for one or more uses (parenthetical values represent 95% confidence intervals). Aquatic life support, contact recreation, and food procurement uses were supported, respectively, in 40% ($\pm 6\%$), 84% ($\pm 5\%$), and 87% ($\pm 9\%$) of the stream miles designated for these uses. Major causes of non-support for streams, in order of prevalence, were nutrient enrichment, sedimentation, weather-related impacts, and elevated levels of fecal bacteria. Sources primarily responsible for pollutant loadings and/or use impairments included agriculture (irrigated and non-irrigated crop production, livestock grazing and feeding operations, unrestricted cattle access), natural phenomena (weather-related impacts), and physical habitat degradation.

Additional section 305(b) and 314(a) reporting requirements were addressed using data from the department's lake and wetland monitoring program. This program surveyed 352 publicly owned and/or publicly accessible waterbodies (316 lakes and 36 wetlands) during the six-year reporting

period, 2004–2009. Physicochemical data obtained from the surveys were compared to established water quality standards to characterize the prevailing level of use support. Long-term trends in the trophic status of lakes and wetlands were analyzed using biological data collected from 1985 through 2009. These data were compared to an existing set of diagnostic thresholds used to interpret narrative water quality criteria for trophic state, nutrient enrichment, and water-column turbidity.

Approximately 9% of the assessed lake acreage fully supported all designated uses, whereas 91% was impaired for one or more designated uses. Sixteen percent of assessed wetland acreage either fully supported all uses or lacked sufficient data to evaluate conditions; the remaining 84% was impaired for one or more designated uses. Major causes of impairment in lakes and wetlands included nutrient enrichment, siltation, elevated turbidity levels, taste and odor problems, and zebra mussel (*Dreissena polymorpha*) infestations. Agriculture, municipal point sources, natural (e.g., weather-related) phenomena, and non-native species introductions were the primary sources of these impairments. Approximately 69% of the assessed lake acreage exhibited no recent change in trophic condition, 25% experienced a measurable increase in trophic state, and 4% exhibited some improvement in trophic condition.

Sampling activities during 2006 coincided with one of the worst droughts on record for Kansas. From 2000 to 2006, annual average flows in many streams were lower than the flows reported during all previously recorded droughts. In 2007, major floods in southeastern Kansas scoured many rivers and creeks and produced sustained high stream flows for much of the summer. The combined effects of these dramatic weather-related events contributed to many of the water quality impairments documented during 2006 and 2007.

The renovation of many wastewater treatment facilities across the state has produced noticeable improvements in surface water quality. As point sources contributing to water quality impairments continue to decline, attention will shift increasingly to nonpoint sources. It is anticipated that watershed pollution control efforts, predicated largely on the development and implementation of TMDLs, will play an increasingly important role in the abatement of nonpoint source pollution in Kansas.

The complete *Kansas Integrated Water Quality Assessment Report 2010* is available online at: www.kdheks.gov/befs/.

KANSAS INTERIM MEASURE ASSESSMENT – IMPROVING WATER QUALITY

Kansas chose to assess possible trends in improved water quality by adapting the Virginia (VADEQ) approach in graphically displaying changes in the proportion of subsequent samples above the upper quartile of parameters from a baseline period and the corresponding proportion of subsequent samples below the lower quartile from that baseline period.

Kansas designated the baseline period as 1990 – 1999 because these data supported 303(d) listing decisions in 2002. We divided the stations in the dataset by their location within each of the twelve river basins as well as 20 selected HUC 8s. Those datasets were further broken out by stations identified as impaired in 2002 and those that were not. Impairment of a given stream station could be by any pollutant. Fourteen parameters (pollutants) were assessed, corresponding to 2010 objectives within the *State Water Plan*:

Reduce the average concentration of bacteria, biochemical oxygen demand, dissolved solids, metals, nutrients, pesticides, and sediment that adversely affect the water quality of Kansas lakes and streams.

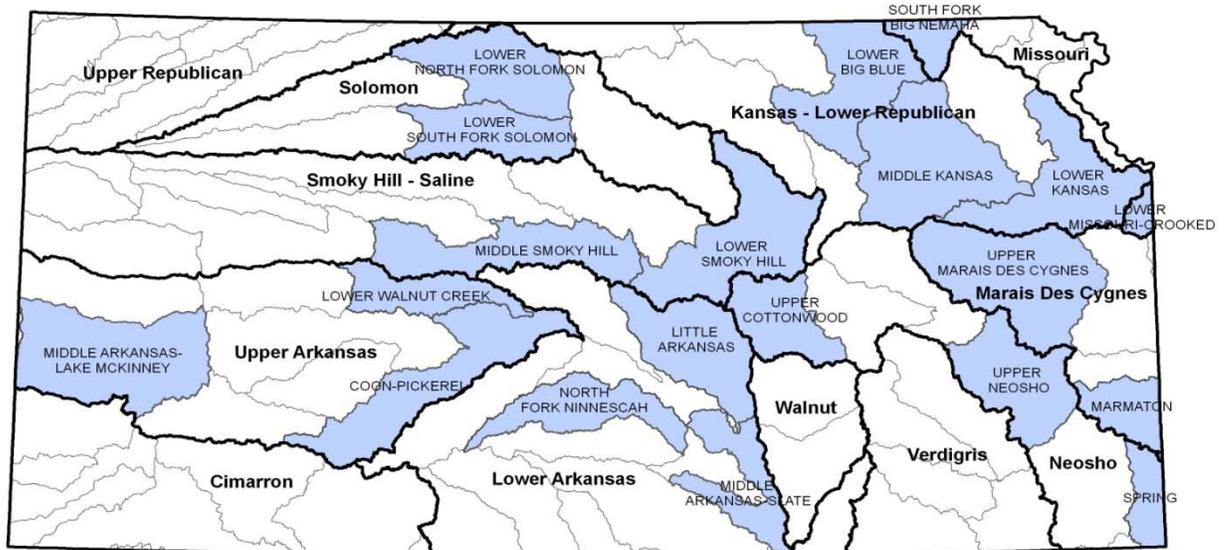
Ensure that water quality conditions are maintained at a level equal or better than year 2000 conditions.

The assessed parameters were bacteria (fecal and E coli), dissolved oxygen, pH, total dissolved solids, chloride, sulfate, selenium, zinc, lead, total phosphorus, nitrate, ammonia, total suspended solids and atrazine.

Lake data was similarly distributed into two time periods of 1990 – 1999 and 2000 – 2009. Parameters assessed were chlorophyll a, total phosphorus, turbidity and Secchi depth. Lakes were aggregated by basin, but not HUC 8 because of sample size considerations. Lakes were designated as impaired or not relative to 2002 303(d) listings and TMDLs.

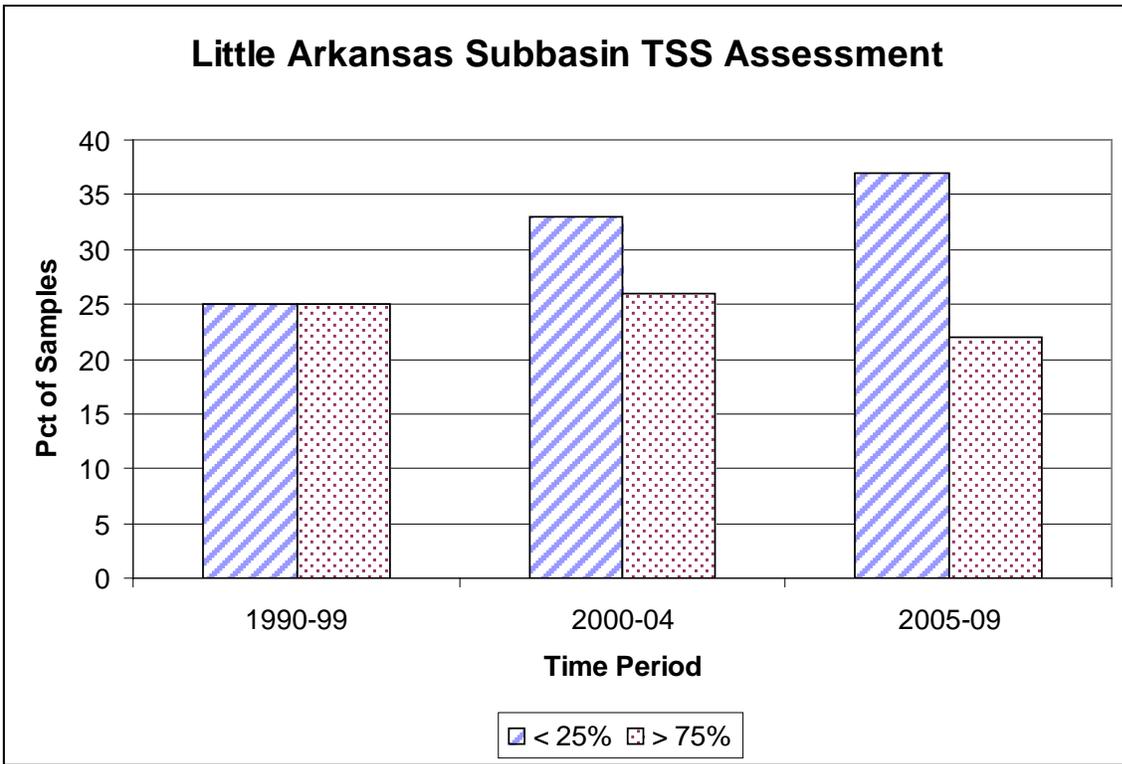
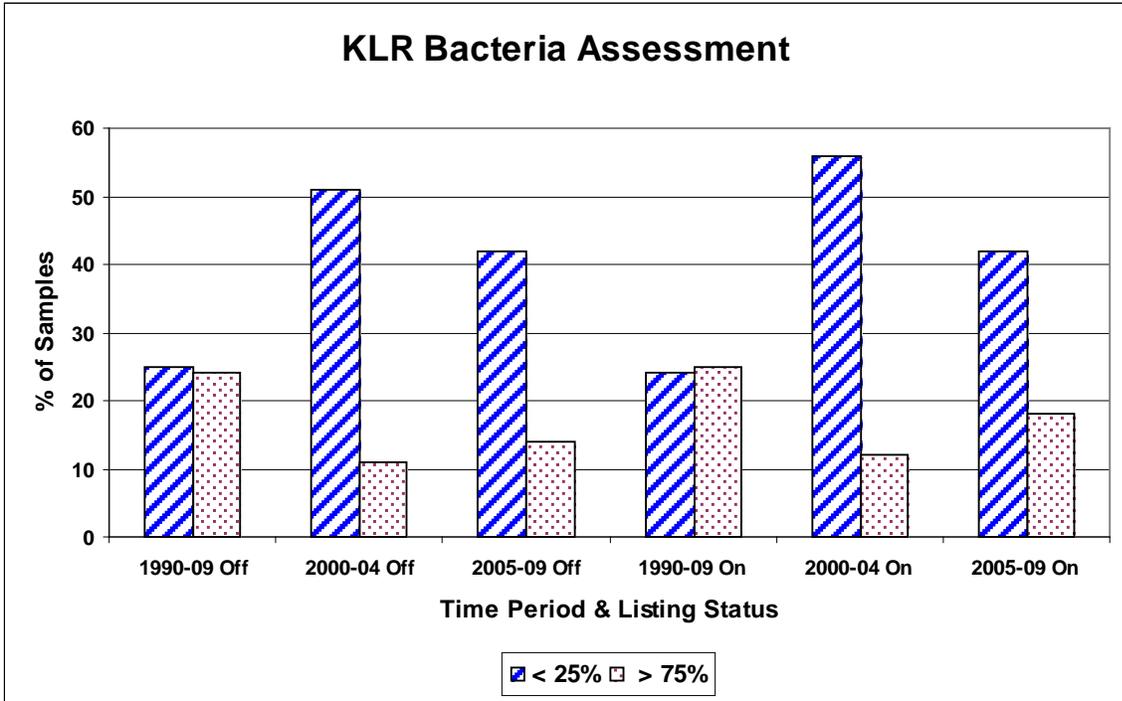
For the stream assessment, upper and lower quartiles of each parameter were determined from 1990 – 1999 listed and unlisted datasets. The proportion of samples collected from 1990 – 1999, 2000 – 2004 and 2005 – 2009 that were below the lower quartile or above the upper quartile values was calculated from each dataset. Because of numerous common value entries for dissolved oxygen and pH and the number of samples that were below detection limits for selenium, zinc, lead, ammonia and atrazine, the proportion of samples above and below the quartiles was not always 25% for the baseline period of 1990 – 1999. Fecal coliform bacteria data prior to 2003 was adjusted by 80% to make those values more equivalent to the subsequent E coli bacteria values collected since 2003.

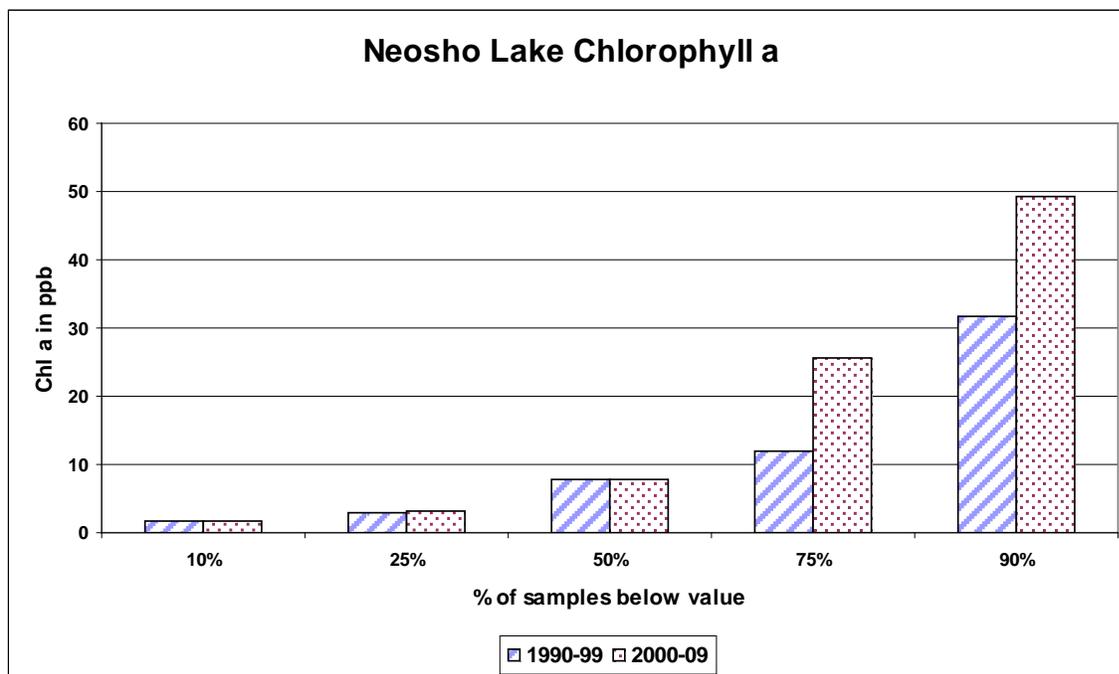
HUC8's Undergoing Interim Measure Analysis



Where sufficient sample sizes were available, the proportions of samples above and below the quartiles were plotted for the six combinations of time period and 303(d) listing status for each of the twelve river basins, e.g.; the Kansas – Lower Republican (KLR). Similar plots were made for each of the 20 HUC 8s, however, the reduced sample sizes from fewer stations and predominant listing of streams would limit the number of permissible calculations in certain HUC 8s. For example, a majority of the stations in the Little Arkansas subbasin were associated with some impairment, therefore a majority of the data existed in the “on 303(d) list” dataset, whereas there were too few data in either the baseline period or two subsequent evaluation periods for the “off 303(d) list” dataset to be assessed.

Similar sample size limitations reduced the ability to use the Virginia approach for lakes. Lakes were distributed by major river basin and must have been sampled in both decades. Initial comparison of 303(d) listed and unlisted lakes unveiled wide and confounding results relative to the water quality characteristics of either set of lakes. Therefore, the two datasets were combined into a solitary set for each basin. The corresponding values for the parameters at the 10%, 25%, 50%, 75% and 90% levels were plotted for the two distinct decades.





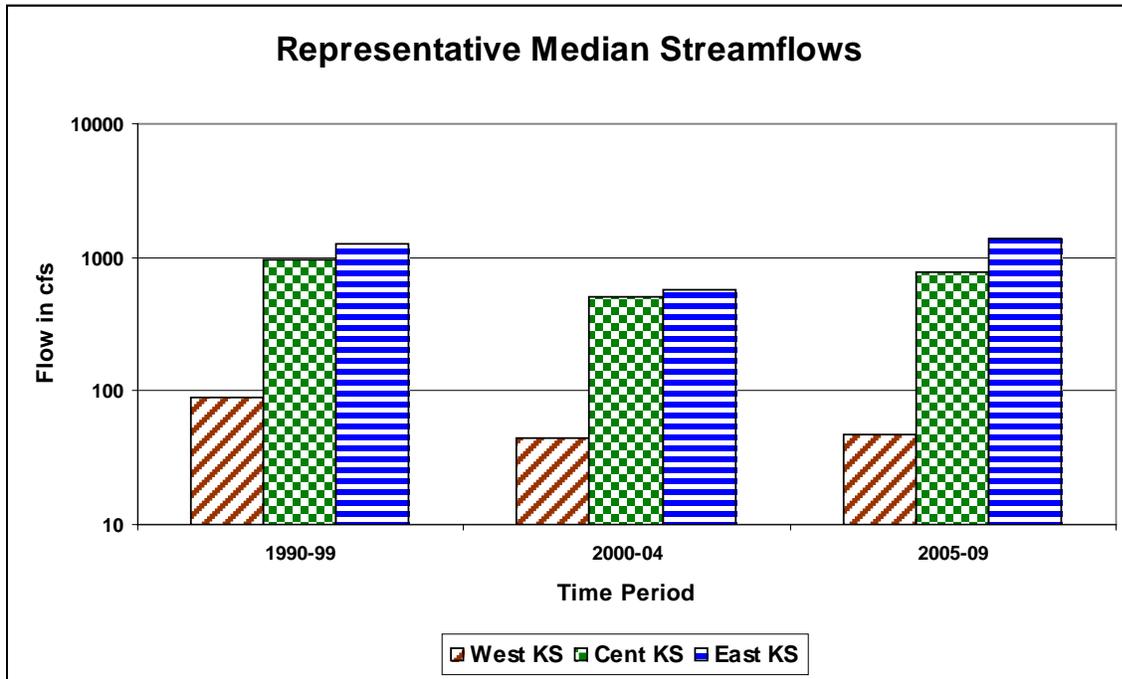
In general, most stream parameters saw a marked increase in the number of samples collected in 2000 – 2004 that were below the lower quartile value from the baseline period 1990 – 1999. Conversely, in many cases, there was some decrease in the number of 2000 – 2004 samples that exceeded the baseline upper quartile value in the basins.

Typically, more than 25% of samples collected in 2005 – 2009 were below the baseline lower quartile. However, the proportion of samples exceeding the baseline upper quartile in this latest evaluation period often increased from those seen earlier in this decade, but usually remained less than the baseline proportion.

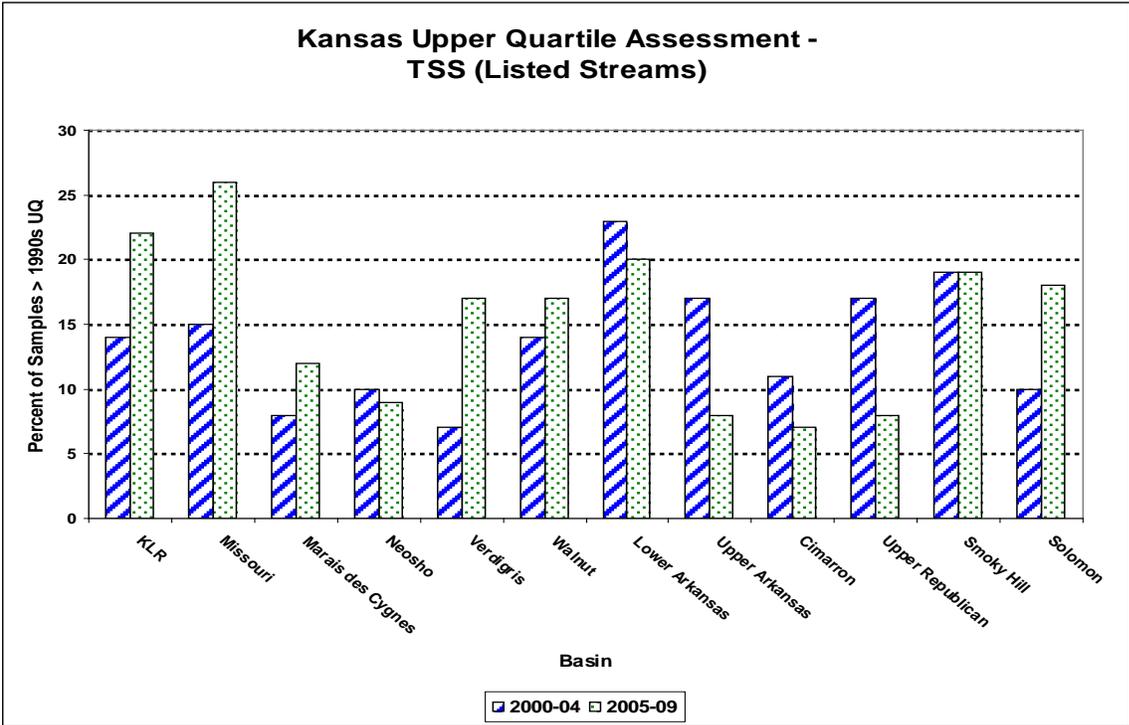
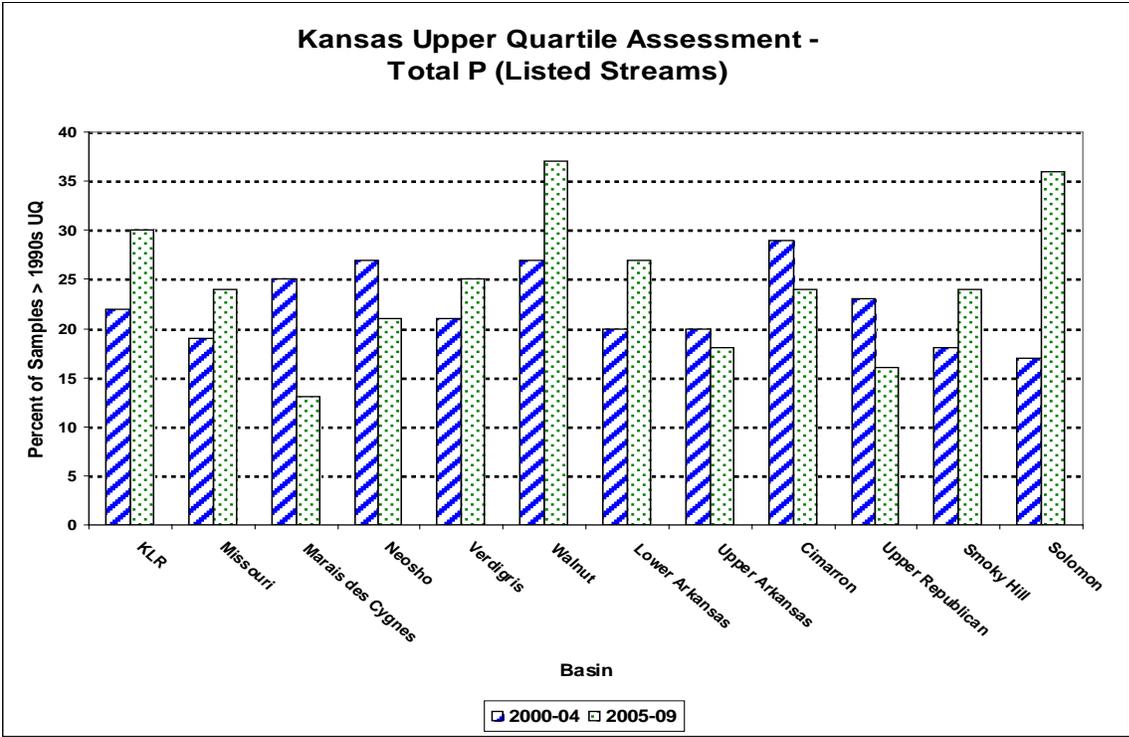
Suspended solids, atrazine and bacteria levels were characteristically lower this decade than in the 1990's and may represent the most notable of impacts from watershed treatment and best management practice implementation. Ammonia saw dramatic decreases likely due to improvements in wastewater treatment (nitrification). Phosphorus and nitrate presented mixed results relative to baseline proportions. Metals saw major decreases, but at least a portion of those results are influenced by quality control issues in the sampling and analysis process during the 1990's. The other parameters were altered to a lesser degree by any readily apparent manmade influence.

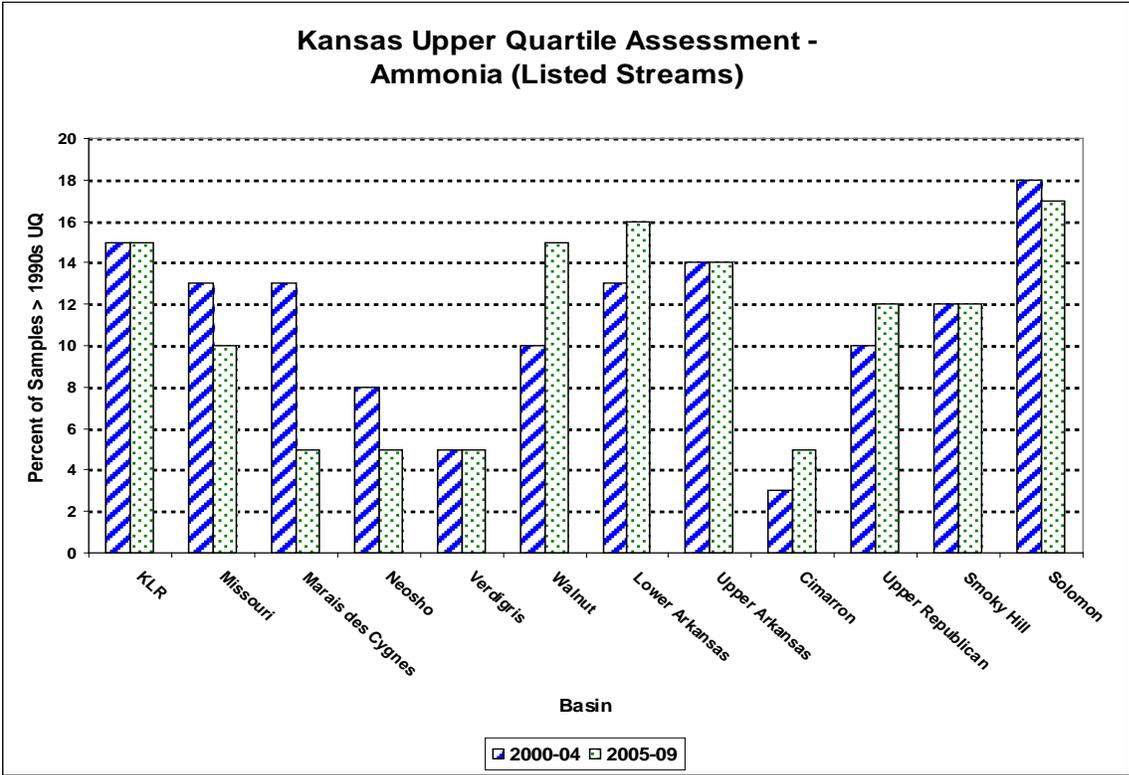
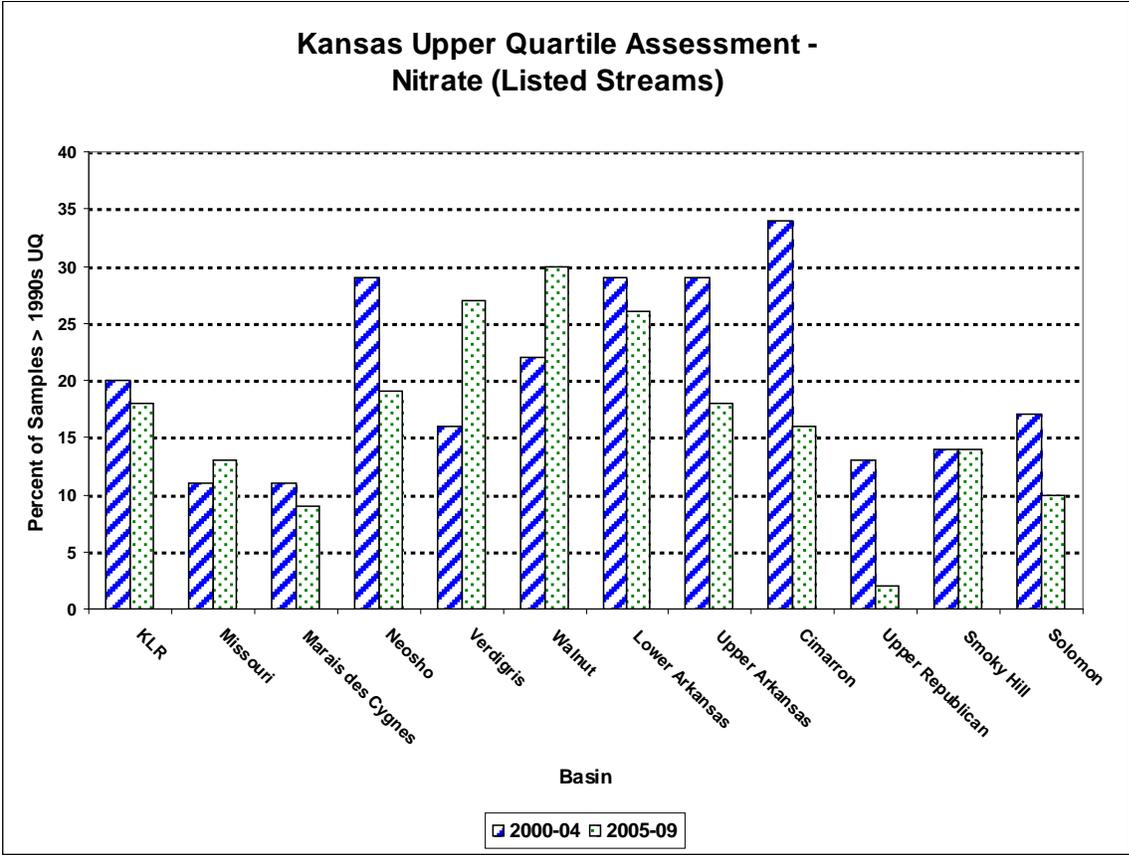
While this assessment implies improved water quality, at least a portion of those results are influenced by the underlying hydrologic conditions during the collection of those samples during the three time periods. The decade of the 1990's was wet throughout Kansas, followed by severe drought in the first half of this decade. Western Kansas remained dry in more recent years, but central and eastern Kansas rebounded in streamflow, with eastern Kansas levels surpassing those of the 1990's. Since much of the water quality degradation is driven by runoff, pervasive low flow conditions typically resulted in improved concentrations for most non-point source pollutants. The slippage in water quality seen during 2005 – 2009 coincides with the resumption of runoff conditions across the state.

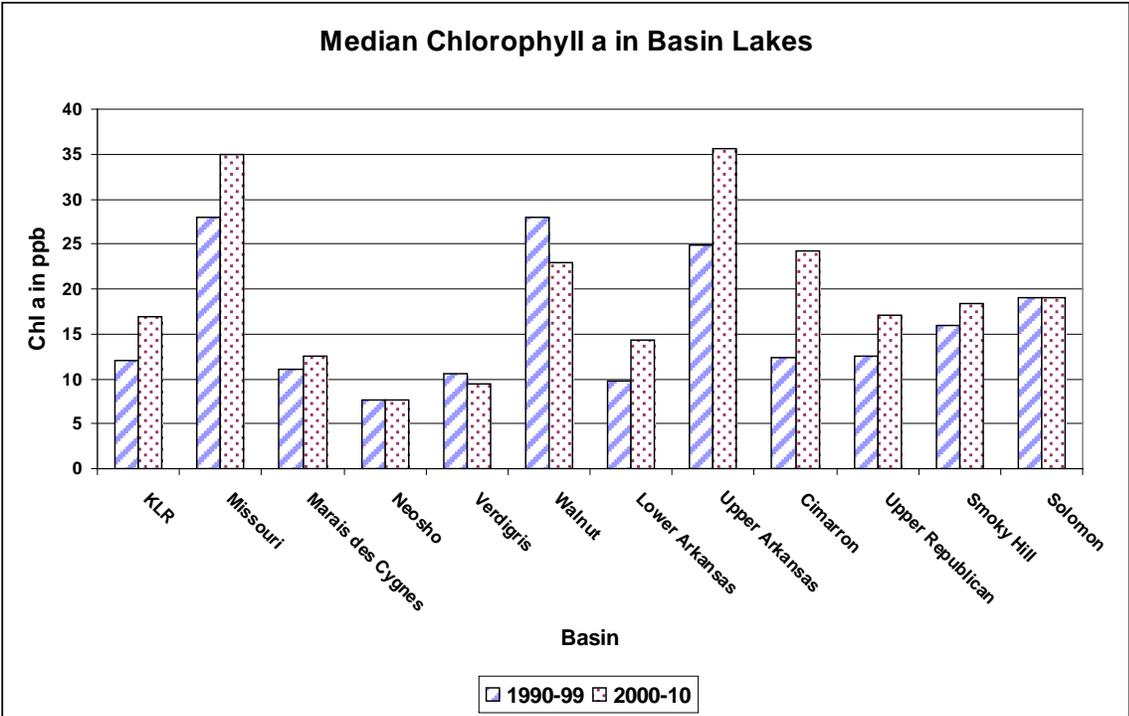
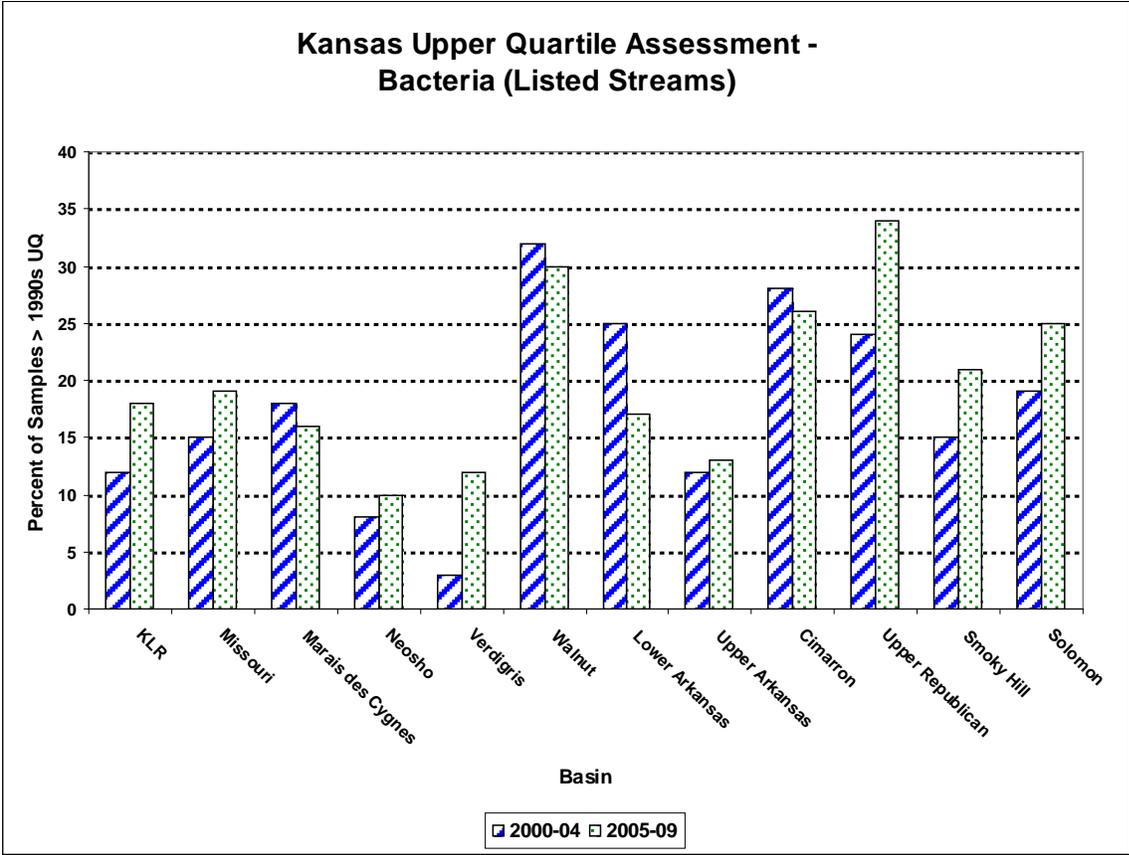
Lakes tended to show elevated chlorophyll a levels this decade relative to what was collected in the 1990's. To some degree, hydrology influences those results as well. The wet, runoff-dominated period last decade loaded nutrients and sediment into the lakes, so light limitations from turbidity may have dampened primary productivity. Conversely, this decade was drier and lake turbidity diminished, allowing primary productivity to take advantage of increased availability of light and stored residual phosphorus in the lake water column to produce larger standing crops of phytoplankton and cyanobacteria since 2000.



For this exercise, Kansas focused on the proportion of subsequent samples from the two evaluation periods since 2000 that had values greater than the baseline upper quartile for total phosphorus, total suspended solids, nitrate, ammonia and bacteria. Improved water quality was defined as fewer samples exceeding the upper quartile values. The statewide analysis focused on the streams that were cited as impaired in 2002, since they comprise the majority of stations and samples to assess. Their status as impaired was not necessarily related to any of the five pollutants assessed in this portion of the exercise.







Phosphorus: Eight basins had fewer samples exceeding the baseline upper quartile in 2000 – 2004. Seven basins saw increases in phosphorus levels between that dry period and the resumed wet conditions during 2005 – 2009, five of which exceeded the baseline levels of the 1990's. The KLR, Walnut and Solomon had the proportionately greatest increases. No discernable impact of wastewater or watershed treatment was seen.

Total Suspended Solids: Every basin saw TSS levels diminish below the baseline upper quartile in 2004. Eight of those basins had only 15% or less of samples exceeding the baseline TSS level. Six basins saw TSS increase in response to runoff in 2005 – 2009, but only the Missouri basin saw more than 25% of samples exceed the 1990s baseline. The Missouri, KLR and Lower Arkansas basins had 20% or more recent samples exceeding the baseline quartile. TSS levels are consistently lower than the baseline period, regardless of weather conditions. Therefore, some impact from erosion control practices across the watersheds is suggested.

Nitrate: Eight basins had fewer than 25% of their 2000 – 2004 samples exceed the baseline upper quartile. The four basins that had more samples exceed the baseline in 2004 saw declining levels in 2005 – 2009, with all but the Lower Arkansas basin falling below the baseline levels. However, two previously low basins, the Verdigris and Walnut, had more than 25% of their recent samples exceed the baseline. The Missouri basin had a minor increase in the proportion of high samples, but the remaining nine basins had fewer samples exceeding the baseline upper quartile in 2005 – 2009. Future results may show continued improvement as more facilities employ denitrification to remove nitrogen in their wastewater.

Ammonia: There was a shift in the laboratory detection limit between the baseline and evaluation periods, therefore, the analysis switched to proportion of samples that essentially had detectable ammonia (> 0.1 mg/l) in the two evaluation periods. All 12 basins had less than 18% of their samples in either period with detectable ammonia. Furthermore, eight basins had fewer detects in the latter evaluation period of 2005 – 2009 than during 2000 – 2004. The relatively highest proportion of detects came from stations within the KLR, Lower Arkansas, Solomon, Upper Arkansas and Walnut, basins with either substantial point source influence or diminished hydrology in receiving streams. Improvements in wastewater treatment to comply with permit limits are a most likely contributor to the improvements seen with ammonia.

Bacteria: Only 3 basins had 25% or more of their samples taken in 2000 – 2004 exceed the baseline levels of bacteria. With the resumption of wet weather after 2005, eight basins showed an increased proportion of samples exceeding the baseline upper quartile. However, the proportion of excessive samples in seven basins remained below 20% in 2009 and only four had 25% or more of their recent samples exceeding the baseline. A factor in these results may be the assumed proportion of E coli bacteria comprising the fecal coliform bacteria counts in the 1990s. Concurrent data collected from Kansas streams indicated that approximately eighty percent of the fecal coliforms were E coli, but if that proportion decreased, the marked reduction in recent bacteria levels might be lessened. Nevertheless, disinfection requirements for wastewater along with some livestock management practices have reduced the incidence of high bacteria on streams.

Lake Chlorophyll: Lakes in ten of the 12 basins had median chlorophyll levels this decade that equaled or exceeded those in the 1990s. Lakes in the Missouri, Upper Arkansas, Cimarron and Walnut basins had the highest median chlorophyll levels since 2000. The first three of those basins have small lakes as opposed to larger Federal reservoirs. The Walnut has one Corps lake, but also

has a number of municipal and county lakes that may be more susceptible to algal growth. Because of extended nutrient retention in most Kansas lakes, their vulnerability to eutrophication is likely to remain high despite reduced nutrient loads from watershed improvements in the future.

Conclusions: There is a notable decrease in certain pollutants where point source treatment upgrades (bacteria, ammonia) are the likely the root cause. Similarly, atrazine levels have diminished since the 1990s, likely the result of reduced applications, particularly during the rainy season. Watershed treatment for soil erosion may be responsible for the consistent reductions in TSS levels seen in Kansas streams since 2000, even during wetter periods. Other pollutants (nitrate, phosphorus) or parameters (DO, pH) have yet to demonstrate notable reductions stemming from anthropogenic influences; weather patterns may influence the occurrence of low or high concentrations more so than control measures.

Kansas will likely follow up on this analysis to further evaluate meeting of 2010 State Water Plan objectives as well provide information for the revisions of the State Non-Point Source Pollution Management Plan.

If a measure such as this one were performed by the State, Kansas would likely prefer to conduct it in five year cycles. Kansas water quality seems particularly sensitive to underlying hydrologic conditions which could mask the net impact of implementation activities. Furthermore, any in-depth analysis of trend needs to either concentrate on select few stations with a higher frequency of sampling or be maintained over larger areas to maintain a robust sample size. Issues of data quality, dynamic detection limits, station density within HUC 8s and temporal frequency of sampling complicate the availability of data to conduct a Virginia-type analysis.

Furthermore, this limited exercise expended about 160 man-hours of effort. Conducting the analysis on the biennial basis of the Integrated Report will add a significant workload burden with marginal results to show each two years.

Additionally, dividing the dataset between 303(d) listed and non-listed waters leads to arbitrary demarcations that do not necessarily correlate water quality data with listing status. This is because listing under Section 303(d) is concerned with excessive digressions from water quality standards, typically at the margins of the frequency distribution of the data. Conducting analysis with the quartiles involves a majority of data that are in compliance with water quality criteria.

Additionally, impairment status is non-specific to the pollutant, therefore a stream impaired by high chloride would have its bacteria or nutrient data used in assessing trends among impaired streams, even though it may not be impaired by those pollutants.

As a rule, 303(d) listing comes about when approximately 10 – 20% of the samples in a given period violate water quality standards. Conversely, assessing water quality with upper and lower quartiles examines data that typically are compliant with water quality criteria. As such, evaluation of degraded waters should focus on how upper decile (90%) values change with time in order to associate with the more critical conditions. Statewide or basinwide assessment of water quality improvement should be conducted with all data, regardless of past or present listing status.

APPENDIX THREE

TOTAL MAXIMUM DAILY LOADS AND 2010 303(d) LIST OF IMPAIRED WATERS

Following are tables of TMDLs developed for each River Basin. Basin maps of high priority TMDL watersheds are provided on pages 39-49.

TMDLs for the Cimarron River Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Cimarron (HUC 11040006)				
CIMARRON RIVER	Cl	Low	SC222	9/11/00
CIMARRON RIVER (pH)	pH	Low	SC222	9/11/00
Subbasin: Crooked (HUC 11040007)				
CROOKED CREEK (Cl)	Cl	Low	SC600	9/11/00
CROOKED CREEK (NH3)	NH3	Cat 3	Modeled - Addressed with NPDES Permit	12/18/08, Further Evaluation in 2012
Subbasin: Upper Cimarron - Bluff (HUC 11040008)				
BLUFF CREEK (Sulf)	Sulf	Low	SC593	9/11/00
CAVALRY CREEK (FCB)	FCB	Medium	SC624	8/9/00
CIMARRON RIVER (Cl)	Cl	Low	SC592	9/11/00
CIMARRON RIVER (Sulf)	Sulf	Low	SC592	9/11/00

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Cimarron (HUC 11040006)				
RUSSELL LAKE (E)	E	Low	LM060101	9/11/00
Subbasin: Crooked (HUC 11040007)				
LAKE MEADE SP (AP)	AP	High	LM010601	9/11/00
LAKE MEADE SP	DO	High	LM010601	9/11/00

<u>(DO)</u>				
<u>LAKE MEADE SP (E)</u>	E	High	LM010601	9/11/00
<u>LAKE MEADE SP (pH)</u>	pH	High	LM010601	9/11/00
Subbasin: Upper Cimarron-Bluff (HUC 11040008)				
<u>BIG BASIN WA (E)</u>	E	High	LM060001	9/11/00

Abbreviations

* -- Computer Modeled

AP -- excessive biomass of submersed vascular plants (macrophytes) that is sufficient to interfere with designated uses or impair the development of trophic state

BOD -- Biochemical Oxygen Demand

CL -- Chloride

DO -- low dissolved oxygen in the upper 3.0 meters of the water column, over the deepest location in the water body

HUC -- U.S. Geological Survey hydrological unit code

E -- eutrophication, biological community impacts, and excessive nutrient/organic loading

FCB -- fecal coliform bacterial count

FLUOR -- Fluoride

NH3 -- total ammonia

pH -- pH over 8.5 or under 6.5

SULF -- sulfate

TMDLs for the Kansas Lower Republican River Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Middle Republican (HUC 10250016)				
<u>REPUBLICAN RIVER (FCB)</u>	FCB	Low	SC231	1/26/00
<u>WHITE ROCK CREEK (Se)</u>	Se	Low	SC508	1/26/00
<u>WHITE ROCK CREEK (FCB)</u>	FCB	Low	SC508	1/26/00
Subbasin: Lower Republican (HUC 10250017)				
<u>BUFFALO CREEK (FCB)</u>	FCB	Low	SC509	1/26/00
<u>BUFFALO CREEK (Cl)</u>	Cl	Low	SC509	1/26/00
BUFFALO CREEK (NH3)	NH3	Cat 3	Modeled - NPDES Permit	12/18/08 - Further Evaluation in 2012

REPUBLICAN RIVER BELOW MILFORD (FCB)	FCB	Cat 4b	Modeled - NPDES Permit	12/18/08
REPUBLICAN RIVER BELOW MILFORD (NH3)	NH3	Cat 4b	Modeled NPDES Permit	12/18/08
<u>REPUBLICAN RIVER NEAR CLAY CENTER (FCB)</u>	FCB	Medium	SC503	1/26/00
<u>REPUBLICAN RIVER NEAR CONCORDIA (FCB)</u>	FCB	Medium	SC003, SC510	1/26/00
<u>SALT CREEK (DO)</u>	DO	High	SC650	1/26/00
<u>SALT CREEK (FCB)</u>	FCB	High	SC650	1/26/00
SALT CREEK (NH3)	NH3	Cat 4b	Modeled -NPDES Permit	12/18/08
Subbasin: Upper Kansas (HUC 10270101)				
<u>CLARKS CREEK (FCB)</u>	FCB	High	SC517	1/26/00
<u>UPPER KANSAS RIVER (CI)</u>	CI	Low	SC262, SC518	1/26/00
<u>UPPER KANSAS RIVER (FCB)</u>	FCB	Medium	SC262, SC518	1/26/00
<u>UPPER KANSAS RIVER (SO4)</u>	SO4	Low	SC262, SC518	1/26/00
<u>WILDCAT CREEK (FCB)</u>	FCB	High	SC652	1/26/00
<u>WILDCAT CREEK (DO)</u>	DO	High	SC652	1/26/00
Subbasin: Middle Kansas (HUC 10270102)				
DOYLE CREEK (FCB)	FCB	Cat 4b	Modeled - NPDES Permit	12/18/08
DOYLE CREEK (NH3)	NH3	Cat 4b	Modeled - NPDES Permit	12/18/08
<u>KANSAS RIVER AT TOPEKA (NH3)</u>	NH3	High	Modeled	4/28/00
<u>KANSAS RIVER AT TOPEKA (FCB)</u>	FCB	Medium	SC258	1/26/00
<u>KANSAS RIVER BELOW TOPEKA (FCB)</u>	FCB	Medium	SC143	1/26/00
<u>KANSAS RIVER</u>	Bio	Medium	SC143, SB257	1/26/00

BELOW TOPEKA (Bio)				
KANSAS RIVER NEAR WAMEGO (FCB)	FCB	Medium	SC260	1/26/00
MILL CREEK (FCB)	FCB	High	SC506, SC519, SC521	1/26/00
SHUNGANUNGA CREEK (DO)	DO	High	SC238	8/3/07
SHUNGANUNGA CREEK (FCB)	FCB	High	SC238	1/26/00
UPPER SOLDIER CREEK (Bio)	Sediment / Bio	High	SC101, SB299	8/3/07
VERMILLION CREEK (FCB)	FCB	High	SC520, SC681	1/26/00
Subbasin: Delaware (HUC 10270103)				
BANNER CREEK (NH3)	NH3	Cat 4b	Modeled - NPDES Permit	12/18/08
DELAWARE RIVER ABOVE PERRY LAKE (FCB)	FCB	High	SC554, SC103	1/26/00
ELK CREEK (NH3)	NH3	High	Modeled	4/28/00
GRASSHOPPER CREEK (FCB)	FCB	High	SC137, SC139, SC603	1/26/00
UPPER DELAWARE RIVER (FCB)	FCB	Cat 4b	Modeled - NPDES Permit	12/18/08
UPPER DELAWARE RIVER (DO)	DO	Cat 4b	Modeled - NPDES Permit	12/18/08
UPPER DELAWARE RIVER (NH3)	NH3	Cat 4b	Modeled - NPDES Permit	12/18/08
Subbasin: Lower Kansas (HUC 10270104)				
CEDAR CREEK (FCB)	FCB	High	SC252	1/26/00
CEDAR CREEK (NO23)	NO23	High	SC252	8/3/07
CROOKED CREEK (Bio)	Bio	Low	SB683	1/26/00
HOG CREEK (NH3)	NH3	Cat 4b	Modeled - NPDES Permit	12/18/08
KANSAS RIVER AT LAWRENCE (NH3)	NH3	Cat 2	Modeled - NPDES Permit	12/18/08 - Delisted
KANSAS RIVER AT	Bio	Medium	SB257, SC256	1/26/00

<u>LAWRENCE (Bio)</u>				
<u>KANSAS RIVER AT LAWRENCE (Chl)</u>	Chl	Low	Near SC256	1/26/00
<u>KILL CREEK (Chl)</u>	Chl	Low	SC253	1/26/00
<u>KILL CREEK (FCB)</u>	FCB	High	SC253	1/26/00
<u>LOWER KANSAS RIVER (Bio)</u>	Bio	Medium	SC127, SC203, SC250, SB254, SC255	1/26/00
<u>LOWER KANSAS RIVER (ECB)</u>	ECB	High	SC203, SC254, SC255, SC257	1/16/08
<u>LOWER KANSAS RIVER (Chl)</u>	Chl	Low	SC127, SC203, SC250, SC254, SC255	1/26/00
<u>LOWER KANSAS RIVER (Bio-med)</u>	Bio	Medium	SC127, SC203, SC250, SB254, SC255	1/26/00
<u>LOWER WAKARUSA RIVER (FCB)</u>	FCB	Medium	SC236, SC500	1/26/00
<u>MILL CREEK (CI)</u>	CI	Low	SC251	1/26/00
<u>MILL CREEK (FCB-high)</u>	FCB	High	SC251	1/26/00
<u>MILL CREEK (JO. CO)</u>	Bio	High	SC251, SB251	8/3/07
<u>NINEMILE CREEK (Zn)</u>	Zn	Low	SC680	1/26/00
<u>STRANGER CREEK (FCB)</u>	FCB	High	SC501, SC602	1/26/00
<u>TURKEY CREEK (NH3)</u>	NH3	High	Modeled	Addressed with NPDES Permit
<u>UPPER WAKARUSA RIVER (Bio)</u>	Bio	High	SB109	1/26/00
<u>UPPER WAKARUSA RIVER (FCB)</u>	FCB	High	SC109	1/26/00
<u>UPPER WAKARUSA RIVER (Bio-high)</u>	Bio	High	SB109	1/26/00
<u>UPPER WAKARUSA RIVER (NH3)</u>	NH3	Cat 3	Modeled - NPDES Permit	12/18/08, Further Evaluation in 2012
<u>WASHINGTON CREEK (DO)</u>	DO	High	SC678	1/26/00
Subbasin: Lower Big Blue (HUC 10270205)				
<u>BIG BLUE RIVER ABOVE TUTTLE</u>	FCB	High	SC233, SC240, SC717	1/26/00

<u>CREEK (FCB)</u>				
<u>BLACK VERMILLION RIVER (FCB)</u>	FCB	High	SC128, SC129, SC130, SC131, SC132, SC133, SC134, SC141, SC505	1/26/00
<u>FANCY CREEK (FCB)</u>	FCB	Medium	SC502	1/26/00
<u>TUTTLE CREEK LAKE & WATERSHED (Atr)</u>	Atr	High	LM021001, SC502, SC505, SC240, SC232, SC233, SC507, SC712, SC717, SC741	8/3/07
Subbasin: Lower Little Blue (HUC 10270207)				
<u>LITTLE BLUE RIVER (FCB)</u>	FCB	High	SC232, SC240, SC507	1/26/00

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Lower Republican (HUC 10250017)				
<u>BELLEVILLE CITY LAKE (EU)</u>	EU	Low	LM060701	1/26/00
<u>JAMESTOWN WMA (EU)</u>	EU	Low	LM052801	1/26/00
<u>JAMESTOWN WMA (pH)</u>	pH	Low	LM052801	1/26/00
<u>JAMESTOWN WMA (Silt)</u>	Silt	Low	LM052801	1/26/00
<u>JAMESTOWN WMA (FCB)</u>	FCB	Low	LM052801	1/26/00
<u>LAKE JEWELL (AP)</u>	AP	Medium	LM062901	1/26/00
<u>LAKE JEWELL (EU)</u>	EU	Medium	LM062901	1/26/00
<u>LAKE JEWELL (DO)</u>	DO	Medium	LM062901	1/26/00
Subbasin: Lower Smoky Hill (HUC 10260008)				
<u>RIMROCK PARK LAKE (DO)</u>	DO	Medium	LM070501	8/7/03
<u>RIMROCK PARK LAKE (EU)</u>	EU	Medium	LM070501	8/7/03
Subbasin: Upper Kansas (HUC 10270101)				
<u>OGDEN CITY LAKE</u>	EU	Low	LM011701	1/26/00

(EU)				
Subbasin: Middle Kansas (HUC 10270102)				
<u>CENTRAL PARK LAKE (EU)</u>	EU	Low	LM060901	1/26/00
<u>GAGE PARK LAKE (EU)</u>	EU	Low	LM061101	1/26/00
<u>MYERS' POND (EU)</u>	EU	Low	LM075201	1/26/00
<u>WAMEGO CITY LAKE (EU)</u>	EU	Low	LM062101	1/26/00
<u>WARREN PARK LAKE (AP)</u>	AP	Low	LM062001	1/26/00
<u>WARREN PARK LAKE (EU)</u>	EU	Low	LM062001	1/26/00
Subbasin: Delaware (HUC 10270103)				
<u>LITTLE LAKE (EU)</u>	EU	Low	LM062601	1/26/00
<u>MISSION LAKE (EU)</u>	EU	High	LM013601	1/26/00
<u>MISSION LAKE (Atr)</u>	Atr	High	LM013601	1/26/00
<u>SABETHA WATERSHED POND (EU)</u>	EU	Low	LM075101	1/26/00
Subbasin: Lower Kansas (HUC 10270104)				
<u>BAKER WETLANDS (DO)</u>	DO	High	LM014401	1/26/00
<u>CLINTON LAKE (EU)</u>	EU	High	LM030001	1/26/00
<u>FRISCO LAKE/JOHNSON CO. (EU)</u>	EU	Low	LM065201	1/26/00
<u>GARDNER CITY LAKE (DO)</u>	DO	High	LM040401	1/26/00
<u>GARDNER CITY LAKE (EU)</u>	EU	High	LM040401	1/26/00
<u>LAKE OLATHE & CEDAR LAKE (EU)</u>	EU	High	LM061301, LM061601	9/28/07
<u>LAKEVIEW ESTATES LAKE (EU)</u>	EU	Low	LM075301	1/26/00
<u>LAKEVIEW ESTATES LAKE (AP)</u>	AP	Low	LM075301	1/26/00
<u>LONE STAR LAKE (EU)</u>	EU	Low	LM011401	1/26/00
<u>MARY'S LAKE (pH)</u>	pH	Medium	LM061401	1/26/00

MARY'S LAKE (EU)	EU	Medium	LM061401	1/26/00
MARY'S LAKE (DO)	DO	Medium	LM061401	1/26/00
PIERSON PARK LAKE (EU)	EU	Low	LM061801	1/26/00
POTTER'S LAKE (EU)	EU	Low	LM073401	1/26/00
POTTER'S LAKE (pH)	pH	Low	LM073401	1/26/00
SUNFLOWER PARK LAKE (EU)	EU	Medium	LM073601	1/26/00
SUNFLOWER PARK LAKE (DO)	DO	Medium	LM073601	1/26/00
WATERWORKS LAKES (EU)	EU	Low	LM062201	1/26/00
Subbasin: Lower Big Blue (HUC 10270205)				
CENTRALIA LAKE (AP)	AP	Medium	LM073701	1/26/00
CENTRALIA LAKE (EU)	EU	Medium	LM073701	1/26/00
CENTRALIA LAKE (pH)	pH	Medium	LM073701	1/26/00
TUTTLE CREEK LAKE (EU)	EU	High	LM021001	1/26/00
TUTTLE CREEK LAKE (Atr)	Atr	High	LM021001	1/26/00
TUTTLE CREEK LAKE (Silt)	Silt	High	LM021001	1/26/00
TUTTLE CREEK LAKE (Ala)	Ala	High	LM021001	1/26/00
TUTTLE CREEK LAKE & WATERSHED (Atr)	Atr	High	LM021001, SC502, SC505, SC240, SC232, SC233, SC507, SC712, SC717, SC741	8/3/07
Subbasin: Lower Little Blue (HUC 10270207)				
LAKE IDLEWILD (EU)	EU	Low	LM061201	1/26/00
WASHINGTON CO SFL (DO)	DO	Low	LM010901	1/26/00
WASHINGTON CO SFL (AP)	AP	Low	LM010901	1/26/00
WASHINGTON WA (EU)	EU	Low	LM010941	1/26/00

WASHINGTON WA (Silt)	Silt	Low	LM010941	1/26/00
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Abbreviations

Ala - Alachlor
AP - Aquatic Plants
Atr - Atrazine
Bio - Biological Impairment
Chl - Chlordane
Cl - Chloride
DO - Dissolved Oxygen
EU - Eutrophication
FCB - Fecal Coliform Bacteria
HUC - Hydrological Unit Code
NH3 - Ammonia
NO23 - Nitrates, Nitrites
Se - Selenium
SO4 - Sulfate
pH - pH
Zn - Zinc

TMDLs for the Lower Arkansas River Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Rattlesnake (HUC 11030009)				
RATTLESNAKE CREEK	SO4	Low	SC030, SC660	7/27/01
RATTLESNAKE CREEK (Cl)	Cl	Low	SC030, SC660	7/27/01
Subbasin: Gar-Peace (HUC 11030010)				
ARKANSAS RIVER ABOVE WICHITA	Chl	Low	SC536	7/27/01
ARKANSAS RIVER BELOW HUTCHINSON	Bio	Medium	SB283, SC524	8/3/07
ARKANSAS RIVER BETWEEN HUTCHINSON AND MAIZE	SO4	Low	SC523, SC524, SC283, SC536	7/27/01

ARKANSAS RIVER BETWEEN NICKERSON AND MAIZE	pH	Medium	SC523, SC524, SC536, SC658, SC659	7/27/01
ARKANSAS RIVER-HUTCH TO MAIZE	Cl	Medium	SC523, SC524, SC283, SC536	9/20/06
PEACE CREEK	FCB	Medium	SC658	7/27/01
PEACE CREEK (Cl)	Cl	Low	SC658	7/27/01
Subbasin: Cow (HUC 11030011)				
COW CREEK	DO	High	SC656, SC657, SC522, SC287	9/11/00
COW CREEK (Chl)	Chl	Low	SC522, SC287	7/27/01
COW CREEK (Cl)	Cl	Medium	SC657, SC522, SC656	9/20/06
COW CREEK (FCB)	FCB	High	SC656, SC657, SC522, SC287	8/9/00
LITTLE COW CREEK	NH3 & NO23	Medium	SC522, SC656, SC657	8/3/07
Subbasin: Little Arkansas (HUC 11030012)				
LITTLE ARKANSAS RIVER	Atr	Cat 4b	SC246, SC282, SC728, SC534, SC535, SC729	12/18/08
LITTLE ARKANSAS RIVER (Sediment)	Sediment (Biology)	High	SB282	9/11/00
LITTLE ARKANSAS RIVER (Bio)	Bio	High	SB282	9/11/00
LITTLE ARKANSAS RIVER (Cl)	Cl	Medium	SC246	9/20/06
LITTLE ARKANSAS RIVER (NH3)	NH3	Delisted 2010	Modeled	8/9/00
LITTLE ARKANSAS RIVER (Chl)	Chl	Delisted 2010	SC282	7/27/01
LITTLE ARKANSAS RIVER (FCB)	FCB	High	SC282, SC534, SC535	8/9/00
SAND CREEK	NO23	High	SC535	8/3/07
SAND CREEK (DO)	DO	Medium	SC535	8/3/07
TURKEY CREEK	Cl	Medium	SC533	9/20/06
TURKEY CREEK (DO)	DO	High	SC533	9/11/00
Subbasin: Middle Arkansas - Slate (HUC 11030013)				
ARKANSAS RIVER	FCB	High	SC281	8/9/00

ARKANSAS RIVER	FCB	Cat 3	Modeled - NPDES Permit	12/18/08, Evaluate in 2010
ARKANSAS RIVER ABOVE ARKANSAS CITY	SO4	Low	SC218, SC527	7/27/01
ARKANSAS RIVER BELOW WICHITA	Bio	Medium	SB281	7/27/01
ARKANSAS RIVER BELOW WICHITA (Chl)	Chl	Low	SC281	7/27/01
ARKANSAS RIVER BETWEEN MAIZE AND DERBY	SO4	Low	SC281	7/27/01
ARKANSAS RIVER- DERBY TO ARK CITY	Cl	Medium	SC218, SC527	9/20/06
ARKANSAS RIVER- MAIZE TO DERBY	Cl	Medium	SC281	9/20/06
COWSKIN CREEK (FCB)	FCB	High	SC288, SC702	8/9/00
COWSKIN CREEK (Chl)	Chl	Low	SC288, SC702	7/27/01
COWSKIN CREEK (Bio)	Bio	High	SC288, SC702, SB346	9/28/07
ARKANSAS RIVER NEAR ARKANSAS CITY	Bio	Medium	SB218	7/27/01
Subbasin: North Fork Ninnescah (HUC 11030014)				
NINNESCAH RIVER, NORTH FORK	pH	Low	SC525	7/27/01
Subbasin: South Fork Ninnescah (HUC 11030015)				
NINNESCAH RIVER, SOUTH FORK	pH	Low	SC036	7/27/01
NINNESCAH RIVER, SOUTH FORK	NH3	Cat 3	Modeled - NPDES Permit	12/18/08, Evaluate in 2010
SMOOTS CREEK	FCB	Medium	SC661	7/27/01
Subbasin: Kaw Lake (HUC 11060001)				
SILVER CREEK	DO	Medium	SC706	9/11/00
Subbasin: Upper Salt Fork Arkansas (HUC 11060002)				
ARKANSAS RIVER, SALT FORK	SO4	Low	SC591	7/27/01
ARKANSAS RIVER,	Cl	Low	SC591	7/27/01

SALT FORK (Cl)				
MULE CREEK	SO4	Low	SC622	7/27/01
MULE CREEK (FCB)	FCB	Medium	SC622	7/27/01
Subbasin: Medicine Lodge (HUC 11060003)				
ELM CREEK	NH3	High	Modeled	8/9/00
MEDICINE LODGE RIVER	FCB	High	SC588	8/9/00
MEDICINE LODGE RIVER (SO4)	SO4	Low	SC220, SC589, SC588	9/20/06
MEDICINE LODGE RIVER (Se)	Se	Low	SC589	7/27/01
Subbasin: Lower Salt Fork Arkansas (HUC 11060004)				
LITTLE SANDY CREEK	FCB	Medium	SC620	7/27/01
SANDY CREEK	FCB	Medium	SC619	7/27/01
Subbasin: Chikaskia (HUC 11060005)				
BLUFF CREEK	Se	Medium	SC618	7/27/01
BLUFF CREEK (FCB)	FCB	High	SC530, SC618	8/9/00
BLUFF CREEK (DO)	DO	High	SC530	9/11/00
FALL CREEK	NH3	High	Modeled	8/9/00
FALL CREEK (FCB)	FCB	High	Modeled	8/9/00
SANDY CREEK	FCB	Cat 3	Modeled - NPDES Permit	12/18/08, Evaluate in 2010
SANDY CREEK	NH3	Cat 3	Modeled - NPDES Permit	12/18/08, Evaluate in 2010
SANDY CREEK	DO	Cat 3	Modeled - NPDES Permit	12/18/08, Evaluate in 2010

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Rattlesnake (HUC 11030009)				
QUIVIRA BIG SALT MARSH	EU	High	LM050601	9/11/00
QUIVIRA BIG SALT MARSH	pH	High	LM050601	9/11/00
QUIVIRA LITTLE SALT MARSH	EU	High	LM050201	9/11/00

QUIVIRA LITTLE SALT MARSH	pH	High	LM050201	9/11/00
Subbasin: Gar-Peace (HUC 11030010)				
CAREY PARK LAKE	EU	Low	LM063001	11/13/00
Subbasin: Cow (HUC 11030011)				
CHEYENNE BOTTOMS WA	DO	High	LM050401	9/11/00
CHEYENNE BOTTOMS WA	EU	High	LM050401	9/11/00
Subbasin: Little Arkansas (HUC 11030012)				
DILLON PARK LAKES (2)	pH	Medium	LM063101	11/13/00
DILLON PARK LAKES (2)	EU	Medium	LM063101	11/13/00
HARVEY CO CAMP HAWK	Silt	Low	LM063401	11/13/00
HARVEY CO CAMP HAWK (EU)	EU	Low	LM063401	11/13/00
HARVEY CO WEST LAKE	EU	Low	LM049001	11/13/00
MINGENBACK LAKE	DO	Medium	LM064701	11/13/00
MINGENBACK LAKE	EU	Medium	LM064701	11/13/00
NEWTON CITY PARK LAKE	EU	High	LM064201	9/11/00
Subbasin: Middle Arkansas - Slate (HUC 11030013)				
CADILLAC LAKE (PRACTH WETLAND)	EU	Low	LM054101	11/13/00
HORSESHOE LAKE	EU	Low	LM063501	11/13/00
KID'S POND	EU	Low	LM063601	11/13/00
SLATE CR WA	Cl	Medium	LM014201	11/13/00
SLATE CR WA (pH)	pH	Medium	LM014201	11/13/00
SLATE CR WA (SO4)	SO4	Low	LM014201	11/13/00
SLATE CR WA (Silt)	Silt	Medium	LM014201	11/13/00
SLATE CR WA (EU)	EU	Medium	LM014201	11/13/00
WATSON PARK	EU	Low	LM064401	11/13/00
Subbasin: North Fork Ninnescah (HUC 11030014)				
CHENEY LAKE	EU	High	LM017001	9/11/00

CHENEY LAKE (Silt)	Silt	High	LM017001	8/9/00
Subbasin: South Fork Ninnescah (HUC 11030015)				
KINGMAN CO SFL	pH	Medium	LM010401	11/13/00
KINGMAN CO SFL	AP	Medium	LM010401	11/13/00
KINGMAN CO SFL	DO	Medium	LM010401	11/13/00
PRATT COUNTY LAKE	EU	High	LM064001	9/11/00
Subbasin: Ninnescah (HUC 11030016)				
LAKE AFTON	EU	High	LM049201	9/11/00
Subbasin: Kaw Lake (HUC 11060001)				
COWLEY CO SFL	Se	Low	LM013401	11/13/00
Subbasin: Medicine Lodge (HUC 11060003)				
BARBER CO SFL/WA	DO	Low	LM013101	11/13/00
Subbasin: Chikaskia (HUC 11060005)				
ISABEL WA	EU	Low	LM014301	11/13/00
ISABEL WA	pH	Low	LM014301	11/13/00
LAKE ANTHONY	EU, Silt, pH, DO	High	LM048801	8/03/07
WELLINGTON OLD CITY LAKE	Silt	Medium	LM042201	11/13/00
WELLINGTON OLD CITY LAKE (Se)	Se	Low	LM042201	11/13/00

Abbreviations

AP - Aquatic Plants
 Atr - Atrazine
 Bio - Biological Impairment
 Chl - Chlordane
 Cl - Chloride
 DO - Dissolved Oxygen
 EU - Eutrophication
 FCB - Fecal Coliform Bacteria
 HUC - Hydrological Unit Code
 NH3 - Ammonia
 NO23 - Nitrates, Nitrites
 Se - Selenium
 Silt - Siltation
 SO4 - Sulfate
 pH - pH

TMDLs for the Marais des Cygnes River Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Marais Des Cygnes (HUC 10290101)				
DRAGOON CREEK	DO	High	SC577, SC687	8/28/01
HUNDRED AND TEN MILE CREEK	DO	High	SC633	8/28/01
MARAIS DES CYGNES RIVER	Se	Low	SC555, SC244	8/28/01
MARAIS DES CYGNES RIVER (FCB)	FCB	High	SC270	8/28/01
MARAIS DES CYGNES RIVER	NH3	Cat 2	NPDES Permit	12/18/08, Delisted
MARAIS DES CYGNES RIVER/142 MILE CREEK	DO	High	SC579	8/28/01
MARAIS DES CYGNES RIVER/142 MILE CREEK (FCB)	FCB	High	SC579	8/28/01
OTTAWA CREEK	DO	High	SC616	8/28/01
POTTAWATOMIE CREEK	DO	High	SC556	8/28/01
POTTAWATOMIE CREEK	FCB	Cat 2	NPDES Permit	12/18/08, Delisted
POTTAWATOMIE CREEK/SOUTH FORK	FCB	Cat 2	NPDES Permit	12/18/08, Delisted
SALT CREEK	FCB	Cat 5	SC578 - NPDES Permit	12/18/08
SALT CREEK	NH3	Cat 5	SC578 - NPDES Permit	12/18/08
SWITZLER CREEK	Se	Low	SC687	8/28/01
TAUY CREEK, EAST FORK	FCB	Cat 3	NPDES Permit	12/18/08, Evaluate in 2010
WALNUT CREEK	NH3	Cat 3	NPDES Permit	12/18/08, Evaluate in 2010
Subbasin: Lower Marais Des Cygnes (HUC 10290102)				

BIG SUGAR CREEK	DO	Medium	SC558	2/28/08
MIDDLE CREEK	DO	High	SC697	8/28/01
Subbasin: Little Osage (HUC 10290103)				
LITTLE OSAGE RIVER	FCB	Medium	SC207	8/28/01
Subbasin: Marmaton (HUC 10290104)				
DRYWOOD CREEK W. FORK	DO	Low	SC617	2/28/08
MARMATON RIVER	DO	High	SC208, SC559	8/28/01
MARMATON RIVER (Bio)	Bio	High	SC208, SB325	8/28/01
MARMATON RIVER	FCB	Cat 3	NPDES Permit	12/18/08, Evaluate in 2010
MARMATON RIVER	NH3	Cat 3	NPDES Permit	12/18/08, Evaluate in 2010

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Marais Des Cygnes (HUC 10290101)				
CRYSTAL LAKE	EU	Medium	LM064901	8/28/01
LEBO CITY PARK LAKE	EU	Low	LM065601	8/28/01
OSAGE CITY RES	EU	Low	LM066101	8/28/01
POMONA LAKE	Silt	High	LM028001	8/28/01
POMONA LAKE (EU)	EU	High	LM028001	8/28/01
SPRING CREEK PARK LAKE	EU	Low	LM066801	8/28/01
SPRING CREEK PARK LAKE	AP	Low	LM066801	8/28/01
Subbasin: Lower Marais Des Cygnes (HUC 10290102)				
EDGERTON CITY LAKE	EU	Medium	LM065001	8/28/01
EDGERTON CITY LAKE (Atr)	Atr	Medium	LM065001	8/28/01
HILLSDALE LAKE	EU	High	LM035001, LM035002, LM035003	8/28/01
LOUISBURG SF LAKE	EU	High	LM043801	2/28/08

MARAIS DES CYGNES WMA	DO	High	LM053201	8/28/01
MARAIS DES CYGNES WMA (Silt)	Silt	High	LM053201	8/28/01
MARAIS DES CYGNES WMA	pH	High	LM053201	8/28/01
MARAIS DES CYGNES WMA	EU	High	LM053201	8/28/01
MIAMI CO SFL/ WA	pH	Medium	LM043601	8/28/01
MIAMI CO SFL/ WA	EU	Medium	LM043601	8/28/01
MOUND CITY LAKE	pH	Medium	LM051401	8/28/01
MOUND CITY LAKE	EU	Medium	LM051401	8/28/01
MOUND CITY LAKE	DO	Medium	LM051401	8/28/01
MOUND CITY LAKE	AP	Medium	LM051401	8/28/01
Subbasin: Little Osage (HUC 10290103)				
PRESCOTT CITY LAKE	EU	Low	LM066601	8/28/01
Subbasin: Marmaton (HUC 10290104)				
BOURBON CNTY SF LAKE	EU, DO, pH	Medium	LM013301	2/28/08
BRONSON CITY LAKE	EU	Medium	LM046201	8/28/01
ELM CREEK LAKE	EU	Low	LM044801	8/28/01
LAKE CRAWFORD	EU	High	LM011101	2/28/08
ROCK CREEK LAKE	EU	High	LM045201	2/28/08

Abbreviations

AP - Aquatic Plants
 Atr - Atrazine
 Bio - Biology
 DO - Dissolved Oxygen
 EU - Eutrophication
 FCB - Fecal Coliform Bacteria
 HUC - Hydrological Unit Code
 NH3 - Ammonia
 pH - pH
 Se - Selenium
 Silt - Siltation

TMDLs for the Missouri Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Tarkio - Wolf (HUC 10240005)				
WOLF RIVER	DO	Cat 2	SC201 - NPDES Permit	12/18/08, Delisted
WOLF RIVER	FCB	High	SC201	8/28/01
WOLF RIVER	NH3	Cat 2	SC201 - NPDES Permit	12/18/08, Delisted
WOLF RIVER (Bio)	Bio	High	SB363, SC201	2/28/08
Subbasin: South Fork Big Nemaha (HUC 10240007)				
BIG NEMAHA RIVER,SOUTH FORK	FCB	High	SC234, SC601, SC682	8/28/01
BIG NEMAHA RIVER,SOUTH FORK	DO	Cat 2	SC234 - NPDES Permit	12/18/08, Delisted
BIG NEMAHA RIVER,SOUTH FORK (Bio)	Bio	High	SB234, SC234, SC601, SC682	2/28/08
ILLINOIS CREEK	Se	Low	SC682	8/28/01
TURKEY CREEK	Atr	Medium	SC601	2/28/08
Subbasin: Big Nemaha (HUC 10240008)				
WALNUT CREEK	FCB	High	SC292	8/28/01
Subbasin: Independence-Sugar (HUC 10240011)				
WHISKEY CREEK	NH3	Cat 2	NPDES Permit	12/18/08, Delisted
Subbasin: Lower Missouri - Crooked (HUC 10300101)				
BLUE RIVER	FCB	Medium	SC205	8/28/01
BLUE RIVER (Chl)	Chl	Low	SC205	8/28/01
BLUE RIVER (Bio)	Bio	Medium	SB205	8/28/01
INDIAN CREEK	FCB	Medium	SC204	8/28/01
INDIAN CREEK (Nitrate)	Nitrate	High	SC204	2/28/08

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Tarkio-Wolf (HUC 10240005)				

BROWN CO SFL/WA	DO	Medium	LM010301	8/28/01
BROWN CO SFL/WA	EU	Medium	LM010301	8/28/01
BROWN CO SFL/WA	pH	Medium	LM010301	8/28/01
BROWN CO SFL/WA	AP	Medium	LM010301	8/28/01
HIAWATHA CITY LAKE	EU	Medium	LM011601	8/28/01
HIAWATHA CITY LAKE (Atr)	Atr	Medium	LM011601	8/28/01
TROY FAIR LAKE (DONIPHAN FAIR ASSOCIATION LAKE)	AP	Low	LM073801	8/28/01
TROY FAIR LAKE (DONIPHAN FAIR ASSOCIATION LAKE)	EU	Low	LM073801	8/28/01
Subbasin: South Fork Big Nemaha (HUC 10240007)				
SABETHA CITY LAKE	EU	Low	LM011501	8/28/01
Subbasin: Big Nemaha (HUC 10240008)				
PONY CREEK LAKE (EU)	EU	High	LM073001	2/28/08
Subbasin: Independence-Sugar (HUC 10240011)				
ATCHINSON CO LAKE	AP	Low	LM012601	8/28/01
ATCHINSON CO LAKE	DO	Low	LM012601	8/28/01
ATCHINSON CO LAKE	EU	Low	LM012601	8/28/01
ATCHINSON CO LAKE (Silt)	Silt	High	LM012601	2/28/08
BIG ELEVEN LAKE	EU	Low	LM067101	8/28/01
LANSING CITY LAKE	pH	Low	LM067210	8/28/01
LANSING CITY LAKE	EU	Low	LM067210	8/28/01
WYANDOTTE CNTY LAKE	EU	High	LM042401	2/28/08
Subbasin: Lower Missouri-Crooked (HUC 10300101)				
ANTIOCH PARK LAKE	Chl	Low	LM067701	8/28/01
SOUTH PARK LAKE	EU	Low	LM067501	8/28/01

Abbreviations

AP - Aquatic Plants
 Atr - Atrazine
 Chl - Chlordane
 DO - Dissolved Oxygen
 EU - Eutrophication
 FCB - Fecal Coliform Bacteria
 HUC - Hydrological Unit Code
 NH3 - Ammonia
 pH - pH
 Se - Selenium

TMDLs for the Neosho Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Neosho Headwaters (HUC 11070201)				
ALLEN CREEK	Cu	Low	SC628	2/25/05
ALLEN/DOWS CREEK	FCB	Medium	SC628	12/13/02
ALLEN/DOWS CREEK (DO)	DO	Medium	SC628	9/30/02
EAGLE CREEK	DO	High	SC634	9/30/02
EAGLE CREEK (Cu)	Cu	Low	SC634	2/25/05
NEOSHO RIVER	FCB	Medium	SC637	9/30/02
NEOSHO RIVER (PARKERVILLE)	Cu	Low	SC637	2/25/05
Subbasin: Upper Cottonwood (HUC 11070202)				
COTTONWOOD RIVER,SOUTH	FCB	Medium	SC635	12/13/02
DOYLE CREEK	NH3	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
DOYLE CREEK	FCB	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
DOYLE CREEK	DO	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
FRENCH CREEK	DO	Medium	SC676	12/13/02
MUD CREEK	FCB	High	SC691	12/13/02
NORTH	Cu	Low	SC636	2/25/05

COTTONWOOD RIVER				
SOUTH COTTONWOOD RIVER	Hg	Low	SC635	2/25/05
COTTONWOOD RIVER	FCB	Medium	SC625, SC627	12/13/02
COTTONWOOD RIVER (SO4)	SO4	Low	SC635, SC676, SC690, SC627	12/13/02
Subbasin: Lower Cottonwood (HUC 11070203)				
COTTONWOOD RIVER (Chl)	Chl	Low	SC120	12/13/02
COTTONWOOD RIVER	FCB	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
FOX CREEK	Bio	Medium	SB718, SC718	1/6/05
SOUTH FORK COTTONWOOD R	Bio	Medium	SB357, SC582	1/6/05
Subbasin: Upper Neosho (HUC 11070204)				
BIG CREEK	FCB	Medium	SC615	12/13/02
BIG CREEK (LEROY)	Cu	Low	SC615	2/25/05
DEER CREEK	FCB	Medium	SC609	12/13/02
LITTLE TURKEY CREEK	NH3	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
LITTLE TURKEY CREEK	FCB	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
NEOSHO RIVER (CHANUTE)	Cu	Low	SC560	2/25/05
OWL CREEK	FCB	Medium	SC610	12/13/02
OWL CREEK (Cu)	Cu	Low	SC610	2/25/05
OWL CREEK	NH3	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
TURKEY CREEK	DO	High	SC614	9/30/02
TURKEY CREEK (FCB)	FCB	High	SC614	12/13/02
NEOSHO RIVER (pH)	pH	Low	SC271, SC560	12/13/02
Subbasin: Middle Neosho (HUC 11070205)				
BACHELOR CREEK (LABETTE)	DO	High	SC698	2/25/05
CANVILLE CREEK	DO	Medium	SC612	9/30/02

CHERRY CREEK	DO	High	SC605	9/30/02
FLAT ROCK CREEK	Cu	Low	SC613	2/25/05
LABETTE CREEK	DO	High	SC564, SC571	9/30/02
LABETTE CREEK	NH3	Cat 3	NPDES Permit	12/18/08, Delisted
LABETTE CREEK	FCB	Cat 3	NPDES Permit	12/18/08, Delisted
Subbasin: Lake O'The Cherokees (HUC 11070206)				
TAR CREEK	Zn, Pb, Cd	Medium	SC110	2/25/05
Subbasin: Spring (HUC 11070207)				
COW CREEK	Chl	Low	SC567	12/13/02
COW CREEK	FCB	Cat 2	NPDES Permit	12/18/08, Delisted
COW CREEK (LAWTON)	SO4	Low	SC567	2/25/05
SHAWNEE CREEK	DO	High	SC569	9/30/02
SPRING RIVER	Zn, Pb, Cu, Cd, Bio	High	SC210, SC211, SB213, SC568, SC569, SC570	6/24/05

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Neosho Headwaters (HUC 11070201)				
COUNCIL GROVE LAKE	EU	High	LM022001	9/30/09
COUNCIL GROVE LAKE (Silt)	Silt	High	LM022001	9/30/02
JOHN REDMOND LAKE	EU	Medium	LM026001	2/27/03
JOHN REDMOND LAKE (Silt)	Silt	Medium	LM026001	2/27/03
JONES PARK POND	EU	Low	LM068701	1/6/05
OLPE CITY LAKE	EU	High	LM041001	1/6/05
OLPE CITY LAKE (Silt)	Silt	High	LM041001	1/6/05
Subbasin: Upper Cottonwood (HUC 11070202)				

MARION CO LAKE	DO	Medium	LM012101	9/30/02
MARION CO LAKE	EU	Medium	LM012101	9/30/02
MARION LAKE	EU	High	LM020001	9/30/09
Subbasin: Upper Neosho (HUC 11070204)				
CHANUTE/SF CITY LAKE	EU	Medium	LM044401	9/30/02
CHANUTE/SF CITY LAKE	DO	Medium	LM044401	9/30/02
CHANUTE/SF CITY LAKE	pH	Medium	LM044401	9/30/02
GRIDLEY CITY LAKE	DO	Medium	LM045601	9/30/02
GRIDLEY CITY LAKE	EU	Medium	LM045601	9/30/02
GRIDLEY CITY LAKE (Be)	Be	Low	LM045601	1/6/05
Subbasin: Middle Neosho (HUC 11070205)				
ALTAMONT CITY LAKE #1, #2(DE), #3	EU	Low	LM068101	9/30/02
BARTLETT CITY LAKE	EU	Low	LM045401	9/30/02
MINED LAND WA UNIT #42	DO	Low	LM038841	9/30/02
NEOSHO CO SFL	DO	Medium	LM044601	9/30/02
NEOSHO CO SFL	EU	Medium	LM044601	9/30/02
NEOSHO CO SFL	pH	Medium	LM044601	9/30/02
NEOSHO WMA	EU	Medium	LM053401	9/30/02
NEOSHO WMA	pH	Medium	LM053401	9/30/02
NEOSHO WMA (Silt)	Silt	Medium	LM053401	9/30/02
NEOSHO	Pb	Medium	LM053401	1/6/05

<u>WMA (Pb)</u>				
<u>PARSONS LAKE</u>	EU	Medium	LM041401	9/30/02
<u>PARSONS LAKE (Silt)</u>	Silt	Medium	LM041401	9/30/02
<u>MINED LAND LAKES</u>	SO4	Low	LM035901,048201,036801,036901,037301,037601,038841,048401	1/6/05
Subbasin: Spring (HUC 11070207)				
<u>PITTSBURG COLLEGE LAKE</u>	EU	Low	LM073301	9/30/02
<u>PITTSBURG COLLEGE LAKE</u>	pH	Low	LM073301	9/30/02
<u>PLAYTER'S LAKE</u>	EU	Low	LM069001	1/6/05

Abbreviations

Be - Beryllium
 Bio - Biological Impairment
 Chl - Chlordane
 Cd - Cadmium
 Cu - Copper
 DO - Dissolved Oxygen
 EU - Eutrophication
 FCB - Fecal Coliform Bacteria
 HUC - Hydrological Unit Code
 Hg - Mercury
 NH3 - Ammonia
 Silt - Siltation
 SO4 - Sulfate
 Pb - Lead
 pH - pH
 Zn - Zinc

TMDLs for the Smoky Hill/Saline Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Smoky Hill (HUC 10260001)				
SMOKY HILL RIVER (ELKADER)	SO4	Low	SC224	3/3/04
SMOKY HILL RIVER (ELKADER) (F)	F	Low	SC224	11/15/04
Subbasin: Upper Smoky Hill (HUC 10260003)				
SMOKY HILL RIVER (TREGO)	Se	Low	SC550	11/15/04
Subbasin: Hackberry (HUC 10260005)				
SMOKY HILL RIVER (TREGO) (SO4)	SO4	Low	SC550	3/3/04
SMOKY HILL RIVER (TREGO) (DO)	DO	Medium	SC550	11/15/04
Subbasin: Middle Smoky Hill (HUC 10260006)				
SMOKY HILL R (ELLSWORTH)	SO4	Low	SC269	3/3/04
SMOKY HILL R (RUSSELL)	SO4	Low	SC007	3/3/04
SMOKY HILL R (SCHOENCHEN)	SO4	Low	SC539	3/3/04
LANDON CREEK	Cl	Low	SC714	11/15/04
SMOKY HILL R (ELLSWORTH) (Cl)	Cl	Low	SC269	11/15/04
SMOKY HILL R (RUSSELL) (Cl)	Cl	Low	SC007	11/15/04
Subbasin: Big (HUC 10260007)				
BIG CREEK (TSS)	TSS	High	SC540	9/30/10
BIG CREEK (Nitrate)	NO3	High	SC540	9/30/10
BIG CREEK (ECB)	ECB	High	SC540	9/30/10
N. FK BIG CREEK	Cl	Low	SC715	11/15/04
Subbasin: Lower Smoky Hill (HUC 10260008)				
HOLLAND CREEK	DO	High	SC642	8/7/03
SMOKY HILL River (Mentor)	ECB	High	SC514	9/30/10

<u>SMOKY HILL R (ENTERPRISE)</u>	SO4	Low	SC265	11/15/04
<u>TURKEY CREEK (ABILENE)</u>	SO4	Low	SC644	11/15/04
<u>SMOKY HILL RIVER (SALINA)</u>	Bio	Low	SB268	3/3/04
<u>HOLLAND CREEK (SO4)</u>	SO4	Low	SC642	11/15/04
<u>SMOKY HILL R (ENTERPRISE) (CI)</u>	CI	Low	SC265	11/15/04
<u>KANSAS RIVER (OGDEN)</u>	CI	Low	SC518	11/15/04
<u>MUD CREEK (ABILENE)</u>	SO4	Low	SC643	11/15/04
<u>KANSAS RIVER (OGDEN) (SO4)</u>	SO4	Low	SC518	11/15/04
<u>CARRY CREEK</u>	SO4	Low	SC708	11/15/04
<u>CHAPMAN CREEK</u>	SO4	Low	SC515	11/15/04
<u>GYPSUM CREEK</u>	SO4	Low	SC641	11/15/04
Subbasin: Upper Saline (HUC 10260009)				
<u>SALINE RIVER (HAYS)</u>	Se	Low	SC548	11/15/04
<u>PARADISE CREEK</u>	CI	Low	SC538	11/15/04
<u>SALINE RIVER (RUSSELL)</u>	Se	Low	SC011	11/15/04
<u>PARADISE CREEK (SO4)</u>	SO4	Low	SC538	11/15/04
<u>SALINE RIVER (HAYS) (SO4)</u>	SO4	Low	SC548	11/15/04
<u>SALINE RIVER (RUSSELL) (SO4)</u>	SO4	Low	SC011	11/15/04
<u>SALINE RIVER (RUSSELL) (CI)</u>	CI	Low	SC011	11/15/04
Subbasin: Lower Saline (HUC 10260010)				
<u>SPILLMAN CREEK</u>	DO	High	SC673	8/7/03
<u>SALINE RIVER (BEVERLY)</u>	SO4	Low	SC513	11/15/04
<u>SALINE RIVER (NEW CAMBRIA)</u>	SO4	Low	SC267	11/15/04
<u>WOLF CREEK</u>	SO4	Low	SC537	11/15/04

<u>(SYLVAN GROVE)</u>				
<u>WOLF CREEK (SYLVAN GROVE) (Se)</u>	Se	Low	SC537	11/15/04
<u>SALINE RIVER (NEW CAMBRIA) (CI)</u>	CI	Low	SC267	11/15/04
<u>WOLF CREEK (SYLVAN GROVE) (CI)</u>	CI	Low	SC537	11/15/04
<u>BULLFOOT CREEK</u>	SO4	Low	SC672	11/15/04
<u>ELKHORN CREEK</u>	SO4	Low	SC671	11/15/04
<u>SALINE RIVER (BEVERLY) (CI)</u>	CI	Low	SC513	11/15/04

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: North Fork Smoky Hill (HUC 10260002)				
<u>SMOKY HILL GARDENS LAKE</u>	EU	Low	LM070101	9/30/03
Subbasin: Upper Smoky Hill (HUC 10260003)				
<u>CEDAR BLUFF LAKE</u>	SO4	Low	LM013001	3/3/04
<u>CEDAR BLUFF LAKE (EU)</u>	EU	Medium	LM013001	9/30/03
Subbasin: Ladder (HUC 10260004)				
<u>LAKE SCOTT SP</u>	AP	High	LM011201	8/7/03
<u>LAKE SCOTT SP</u>	EU	High	LM011201	8/7/03
<u>LAKE SCOTT SP</u>	pH	High	LM011201	8/7/03
Subbasin: Middle Smoky Hill (HUC 10260006)				
<u>FOSSIL LAKE</u>	EU	Low	LM052601	9/30/03
<u>FOSSIL LAKE (Silt)</u>	Silt	Low	LM052601	9/30/03
<u>KANOPOLIS LAKE</u>	SO4	Low	LM016001	3/3/04
<u>KANOPOLIS LAKE</u>	EU	High	LM016001	8/7/03
<u>KANOPOLIS LAKE (CI)</u>	CI	Low	LM016001	11/15/04
Subbasin: Big (HUC 10260007)				
<u>BIG CREEK OXBOW</u>	EU	Low	LM070301	9/30/03
<u>ELLIS CITY LAKE</u>	EU	Low	LM069601	9/30/03

Subbasin: Lower Smoky Hill (10260008)				
MCPHERSON CO SFL/WA	AP	Medium	LM013501	9/30/03
MCPHERSON CO SFL/WA	DO	Medium	LM013501	9/30/03
MCPHERSON CO SFL/WA	EU	Medium	LM013501	9/30/03
MCPHERSON CO SFL/WA	pH	Medium	LM013501	9/30/03
HERINGTON RES	Atr	Medium	LM047201	9/30/03
HERINGTON CITY PARK LAKE	EU	Low	LM072801	9/30/03
HERINGTON RES (DO)	DO	High	LM047201	8/7/03
LAKEWOOD PARK LAKE	EU	Low	LM069801	9/30/03
GEARY CO SFL	EU	Medium	LM043201	9/30/03
HERINGTON CITY LAKE	EU	Low	LM069701	9/30/03
HERINGTON RES (EU)	EU	High	LM047201	8/7/03
Subbasin: Upper Saline (HUC 10260009)				
PLAINVILLE TOWNSHIP	EU	Low	LM070001	9/30/03
SHERIDAN WA	pH	Medium	LM014501	9/30/03
SHERIDAN WA (FCB)	FCB	Medium	LM014501	9/30/03
WILSON LAKE	Cl	Low	LM014001	11/15/04
WILSON LAKE (SO4)	SO4	Low	LM014001	11/15/04

Abbreviations

- AP** - Aquatic Plants
- Atr** - Atrazine
- Bio** - Biological Impairment
- Cl** - Chloride
- Cu** - Copper
- DO** - Dissolved Oxygen Deficiency
- HUC** - Hydrological Unit Code
- EU** - Eutrophication
- F** - Fluoride
- FCB** - Fecal Coliform Bacteria
- pH** - pH over 8.5 or less than 6.5
- Se** - Selenium

Silt - Siltation
SO4 - Sulfate

TMDLs for the Solomon River Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper North Fork Solomon (HUC 10260011)				
BOW CREEK	Se	Low	SC545	1/21/04
UPPER N FK SOLOMON R	Se	Low	SC546	1/21/04
UPPER N FK SOLOMON R (SO4)	SO4	Low	SC546	1/21/04
Subbasin: Lower North Fork Solomon (HUC 10260012)				
BEAVER CREEK (GAYLORD)	SO4	Low	SC670	1/21/04
BEAVER CREEK (GAYLORD) (Se)	Se	Low	SC670	1/21/04
DEER CREEK (KIRWIN)	Se	Low	SC721	1/21/04
DEER CREEK (KIRWIN) (SO4)	SO4	Low	SC721	1/21/04
LOWER N FK SOLOMON R	SO4	Low	SC014	1/21/04
LOWER N FK SOLOMON R (Se)	Se	Low	SC014	1/21/04
OAK CREEK	SO4	Low	SC544	1/21/04
OAK CREEK (Se)	Se	Low	SC544	1/21/04
Subbasin: Upper South Fork Solomon (HUC 10260013)				
UPPER S FK SOLOMON R	SO4	Low	SC547	1/21/04
UPPER S FK SOLOMON R (Se)	Se	Low	SC547	1/21/04
Subbasin: Lower South Fork Solomon (HUC 10260014)				
CARR CREEK	SO4	Low	SC669	1/21/04
COVERT CREEK	Se	Low	SC666	1/21/04
COVERT CREEK	SO4	Low	SC666	1/21/04

<u>(SO4)</u>				
<u>KILL CREEK (BLOOMINGTON)</u>	SO4	Low	SC665	1/21/04
<u>KILL CREEK (BLOOMINGTON) (Se)</u>	Se	Low	SC665	1/21/04
<u>LOWER S FK SOLOMON R</u>	Se	Low	SC542, SC543	1/21/04
<u>LOWER S FK SOLOMON R (SO4)</u>	SO4	Low	SC542, SC543	1/21/04
<u>LOWER S FK SOLOMON R (Bio)</u>	Bio	Low	SB543	1/21/04
<u>TWIN CREEK</u>	DO	Medium	SC668	1/21/04
Subbasin: Solomon River (HUC 10260015)				
<u>BROWNS CREEK</u>	DO	Medium	SC716	1/21/04
<u>LIMESTONE CREEK</u>	SO4	Low	SC667	1/21/04
<u>LIMESTONE CREEK (DO)</u>	DO	High	SC667	8/7/03
<u>LIMESTONE CREEK (Se)</u>	Se	Low	SC667	1/21/04
<u>LOWER SOLOMON RIVER</u>	SO4	Low	SC266	1/21/04
<u>LOWER SOLOMON RIVER (CI)</u>	CI	Low	SC266	1/21/04
<u>SALT CREEK (MINNEAPOLIS)</u>	CI	Low	SC512	1/21/04
<u>SALT CREEK (MINNEAPOLIS) (SO4)</u>	SO4	Low	SC512	1/21/04
<u>UPPER SOLOMON RIVER</u>	SO4	Low	SC511	1/21/04
<u>UPPER SOLOMON RIVER (CI)</u>	CI	Low	SC511	1/21/04

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper North Fork Solomon (HUC 10260011)				
<u>KIRWIN LAKE</u>	EU	Medium	LM011001	9/30/03
<u>KIRWIN LAKE</u>	DO	Medium	LM011001	9/30/03

LOGAN CITY LAKE	EU	Low	LM069301	9/30/03
Subbasin: Upper South Fork Solomon (HUC 10260013)				
SHERIDAN CO SFL	DO	Medium	LM069401	9/30/03
SHERIDAN CO SFL	EU	Medium	LM069401	9/30/03
WEBSTER LAKE	EU	Medium	LM012001	9/30/03
WEBSTER LAKE (SO4)	SO4	Low	LM012001	1/21/04
Subbasin: Lower South Fork Solomon (HUC 10260014)				
ROOKS CO SFL/WA	EU	Medium	LM011901	9/30/03
ROOKS CO SFL/WA	DO	Medium	LM011901	9/30/03
Subbasin: Solomon River (HUC 10260015)				
OTTAWA CO SFL	AP	Medium	LM014101	9/30/03
OTTAWA CO SFL	EU	Medium	LM014101	9/30/03
OTTAWA CO SFL	DO	Medium	LM014101	9/30/03
WACONDA LAKE	EU	Medium	LM018001	9/30/03
WACONDA LAKE (SO4)	SO4	Low	LM018001	1/21/04

Abbreviations

AP - Aquatic Plants
 Cl - Chloride
 DO - Dissolved Oxygen Deficiency
 HUC - Hydrological Unit Code
 EU - Eutrophication
 Se - Selenium
 Bio - Biological Impairment
 SO4 - Sulfate

TMDLs for the Upper Arkansas River Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Middle Arkansas-Lake McKinney (HUC 11030001)				
ARKANSAS RIVER	Boron	Medium	SC223, SC598, SC286	9/11/00
ARKANSAS RIVER (Sulf)	Sulf	Medium	SC223, SC598, SC286	9/11/00
ARKANSAS RIVER	NH3	Cat 3	Modeled - NPDES Permit	12/18/08, Further Evaluate in 2010
ARKANSAS RIVER NEAR GARDEN CITY	FCB	High	SC286	8/9/00
ARKANSAS RIVER (pH)	pH	Medium	SC286, SC598	9/11/00
ARKANSAS RIVER (Selenium)	Selenium	High	SC223, SC598, SC286	2/28/08
Subbasin: Arkansas-Dodge City (HUC 11030003)				
ARKANSAS RIVER (GARDEN CITY TO FORD)	FCB	High	SC594	8/9/00
ARKANSAS RIVER (Sulf-med)	Sulf	Medium	SC286, SC594, SC587	9/11/00
Subbasin: Arkansas - Pickerel (HUC 11030004)				
ARKANSAS RIVER (NH3)	NH3	High	Modeled	8/9/00
ARKANSAS RIVER (FORD TO KINSLEY)	FCB	High	SC587	8/9/00
ARKANSAS RIVER (KINSLEY TO DUNDEE)	FCB	High	SC584	8/9/00
ARKANSAS RIVER (Bio)	Bio	Medium	SB284	9/11/00
ARKANSAS RIVER (Flour)	Fluor	Medium	SC587	9/11/00
ARKANSAS RIVER (Sulf-medium)	Sulf	Medium	SC584, SC284	9/11/00
ARKANSAS RIVER NEAR GREAT BEND	FCB	High	SC284	8/9/00
Subbasin: Pawnee (HUC 11030005)				

PAWNEE RIVER & BUCKNER CREEK	FCB	High	SC586	8/9/00
Subbasin: Upper Walnut Cr (HUC 11030007)				
WALNUT CREEK, NORTH FORK	FCB	High	SC595	8/9/00
WALNUT CREEK, NORTH FORK (Sulf)	Sulf	Low	SC595, SC596, SC597	9/11/00

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Middle Arkansas-Lake McKinney (HUC 11030001)				
HAMILTON CO SFL	AP	Low	LM016101	9/11/00
HAMILTON CO SFL	E	Low	LM016101	9/11/00
HAMILTON WA	DO	Low	LM016141	9/11/00
HAMILTON WA	E	Low	LM016141	9/11/00
Subbasin: Buckner (HUC 11030006)				
JETMORE LAKE	AP	Low	LM073901	8/9/00
FORD CO LAKE	DO	High	LM070801	9/11/00
FORD CO LAKE	E	High	LM070801	9/11/00
FORD CO LAKE	pH	High	LM070801	9/11/00
Subbasin: Lower Walnt Cr (HUC 11030008)				
STONE LAKE	E	Low	LM074001	9/11/00

Abbreviations

* -- Computer Modeled

AP -- excessive biomass of submersed vascular plants (macrophytes) that is sufficient to interfere with designated uses or impair the development of trophic state

BOD -- Biochemical Oxygen Demand

CL -- Chloride

DO -- low dissolved oxygen in the upper 3.0 meters of the water column, over the deepest location in the water body

HUC -- U.S. Geological Survey hydrological unit code

E -- eutrophication, biological community impacts, and excessive nutrient/organic loading

FCB -- fecal coliform bacterial count

FLUOR -- Fluoride

NH3 -- total ammonia

pH -- pH over 8.5 or under 6.5

SULF -- sulfate

TMDLs for Upper Republican Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Arikaree (HUC 10250001)				
ARIKAREE RIVER	SO4	Low	SC226	9/20/06
ARIKAREE RIVER (Se)	Se	Low	SC226	9/20/06
ARIKAREE RIVER (pH)	pH	Low	SC226	9/20/06
ARIKAREE RIVER (F)	F	Low	SC226	9/20/06
Subbasin: South Fork Republican (HUC 10250003)				
LOWER S FK. REPUBLICAN RIVER	pH	Low	SC227	8/7/03
LOWER S FK. REPUBLICAN RIVER (F)	F	Low	SC227	8/7/03
UPPER S FK. REPUBLICAN RIVER	F	Low	SC225	8/7/03
Subbasin: South Fork Beaver, Little Beaver, Beaver (HUCs 10250012, 0013, & 0014)				
BEAVER CREEK	F	Low	SC228	9/20/06
BEAVER CREEK (DO)	DO	Low	SC228	9/20/06
Subbasin: Prairie Dog (HUC 10250015)				
LOWER PRAIRIE DOG CREEK	DO	High	SC230	8/7/03

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Prairie Dog (HUC 10250015)				
COLBY CITY POND	EU	Low	LM071301	8/7/03
NORTON LAKE	pH	Low	LM010001	8/7/03
NORTON LAKE	EU	Low	LM010001	8/7/03
NORTON LAKE	DO	Low	LM010001	8/7/03

Abbreviations

DO -- Dissolved Oxygen Deficiency
HUC -- U.S. Geological Survey hydrological unit code
EU -- Eutrophication
F -- Fluoride
FC -- Fecal Coliform Bacteria
pH -- pH
Se -- Selenium
SO4 -- Sulfate

TMDLs for the Verdigris Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Verdigris (HUC 11070101)				
CHETOPA CREEK	DO	Medium	SC696	9/30/02
CHETOPA CREEK (FCB)	FCB	Medium	SC696	9/30/02
WALNUT CREEK	DO	Medium	SC576	9/30/02
WEST CREEK	DO	Medium	SC290	9/30/02
Subbasin: Fall (HUC 011070102)				
FALL RIVER	DO	Medium	SC575	9/30/02
FALL RIVER (FCB)	FCB	High	SC575	9/30/02
Subbasin: Middle Verdigris (HUC 11070103)				
BIG HILL CREEK	FCB	Medium	SC607	9/30/02
BIG HILL CREEK (DO)	DO	Medium	SC607	9/30/02
DRUM CREEK	FCB	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
DRUM CREEK	NH3	Cat 3	NPDES Permit	12/18/08, Further Evaluate in 2012
ONION CREEK	DO	Medium	SC608	9/30/02
PUMPKIN CREEK	DO	Medium	SC606	9/30/02
VERDIGRIS RIVER	FCB	Medium	SC563	9/30/02
VERDIGRIS RIVER, LOWER	NH3	Cat 3	SC563 - NPDES Permit	12/18/08, Further Evaluate in 2012
VERDIGRIS RIVER	NH3	Cat 3	SC215 - NPDES Permit	12/18/08, Further Evaluate in 2010

VERDIGRIS RIVER (Bio)	Bio	Medium	SB215, SB563	9/30/02
VERDIGRIS RIVER	FCB	Cat 3	SC215 - NPDES Permit	12/18/08, Further Evaluate in 2012
Subbasin: Elk (HUC 11070104)				
ELK RIVER	DO	Medium	SC693	9/30/02
ELK RIVER (FCB)	FCB	Medium	SC693	9/30/02
Subbasin: Caney (HUC 11070105)				
LITTLE CANEY CREEK	FCB	Cat 3	SC572 - NPDES Permit	12/18/08, Further Evaluate in 2012

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Verdigris (HUC 11070101)				
EUREKA CITY LAKE	EU / Silt	Medium	LM040201	9/30/09
TORONTO LAKE	EU/DO/Silt	High	LM024001	9/30/09
WILSON CO SFL	EU	Medium	LM015101	9/30/02
WILSON CO SFL	DO	Medium	LM015101	9/30/02
WOODSON WA	DO	Medium	LM011841	9/30/02
WOODSON WA	EU	Medium	LM011841	9/30/02
WOODSON WA (FCB)	FCB	Low	LM011841	9/30/02
Subbasin: Fall (HUC 11070102)				
FALL RIVER LAKE	EU/DO/Silt	High	LM023001	9/30/09
Subbasin: Middle Verdigris (HUC 11070103)				
BIG HILL LAKE	EU	HIGH	LM031001	9/30/09
CHERRYVALE CITY LAKE	EU	Low	LM071601	9/30/02
LA CLAIRE LAKE	EU	Low	LM072901	9/30/02
MONTGOMERY CO SFL	pH	Medium	LM010701	9/30/02
MONTGOMERY CO SFL	EU	Medium	LM010701	9/30/02
MONTGOMERY CO SFL	DO	Medium	LM010701	9/30/02
Subbasin: Elk (HUC 11070104)				
ELK CITY LAKE	EU/Silt	Medium	LM025001	9/30/09

Abbreviations

Bio - Biology
 DO - Dissolved Oxygen
 EU - Eutrophication
 FCB - Fecal Coliform Bacteria
 HUC - Hydrological Unit Code
 NH3 - Ammonia
 pH - pH

TMDLs for the Walnut Basin

Table 1 - Stream TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Walnut (11030017)				
WALNUT RIVER	Ammonia	Cat 2	SC279 - NPDES Permit	12/18/08, Delisted
WHITEWATER RIVER	Ammonia	Cat 2	SC106, SC038 - NPDES Permit	12/18/08, Delisted
WHITEWATER RIVER	FCB	Cat 2	SC106, SC038 - NPDES Permit	12/18/08, Delisted
<u>UPPER WALNUT RIVER</u>	FCB	High	SC279	9/30/02
<u>WHITEWATER RIVER</u>	FCB	High	SC038	9/30/02
<u>WALNUT RIVER (Butler Co.)</u>	Bio	Medium	SB106	9/30/02
<u>WALNUT RIVER</u>	Sulfate	Low	SC106, SC704, SC038	9/30/02
Subbasin: Lower Walnut (11030018)				
<u>LITTLE WALNUT RIVER</u>	FCB	High	SC655	9/30/02
<u>ROCK CREEK</u>	FCB	High	SC654	9/30/02
<u>WALNUT RIVER (Cowley Co.)</u>	Bio	Medium	SC106, SB315, SC532	9/30/02
TIMBER CREEK	Ammonia	Cat 2	SC653 - NPDES Permit	12/18/08, Delisted

Table 2 - Lake TMDLs

Waterbody	Impairment	Priority	Station	ApprovalStatus
Subbasin: Upper Walnut (11030017)				
HARVEY CO EAST LAKE	Eutrophication	Medium	LM052001	9/30/02
AUGUSTA SANTA FE LAKE	Eutrophication	Medium	LM041601	9/30/02
AUGUSTA SANTA FE LAKE	DO	Medium	LM041601	9/30/02
AUGUSTA SANTA FE LAKE (Silt)	Silt	Medium	LM041601	9/30/02
EL DORADO LAKE	Eutrophication	High	LM033001	9/30/02
EL DORADO LAKE (Silt)	Silt	High	LM033001	9/30/02
Subbasin: Lower Walnut (11030018)				
WINFIELD CITY LAKE	Eutrophication	High	LM050801	9/30/09
WINFIELD PARK LAGOON	Eutrophication	Low	LM072301	9/30/02
BUTLER CO SFL/WA	Eutrophication	Medium	LM049401	9/30/02

Abbreviations

- * -- Computer Modeled
- BOD** -- Biochemical Oxygen Demand
- DO** -- low dissolved oxygen in the upper 3.0 meters of the water column, over the deepest location in the water body
- HUC** -- U.S. Geological Survey hydrological unit code
- E** -- eutrophication, biological community impacts, and excessive nutrient/organic loading
- FCB** -- fecal coliform bacterial count
- NH3** -- total ammonia
- pH** -- pH over 8.5 or under 6.5
- SILT** -- observed siltation and/or identified chronic turbidity that impacts development of trophic state
- SULF** -- sulfate

HIGH PRIORITY TMDL WATERSHEDS – RIVER BASIN MAPS
 (Sources: 2009 *Kansas Water Plan* and KDHE Bureau of Watershed Planning)

Kansas-Lower Republican Basin
 Total Maximum Daily Load High Priority Areas

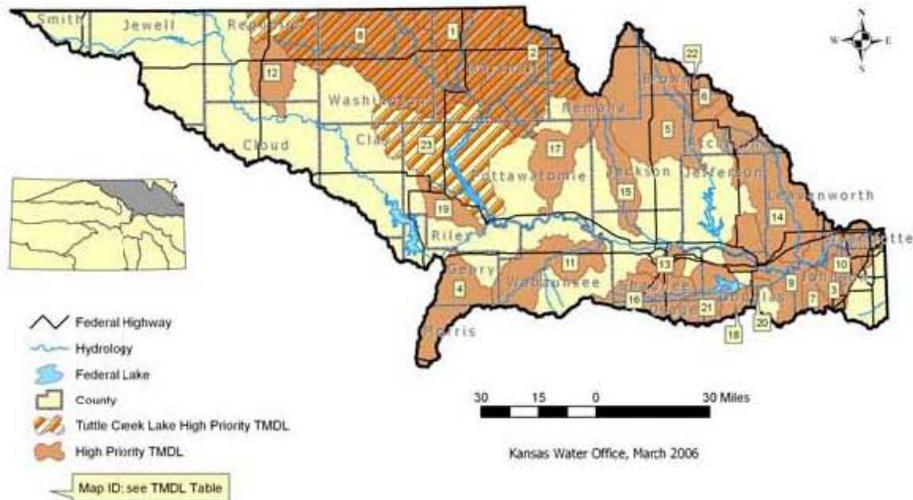


TABLE 1
KANSAS-LOWER REPUBLICAN BASIN HIGH PRIORITY TMDLS

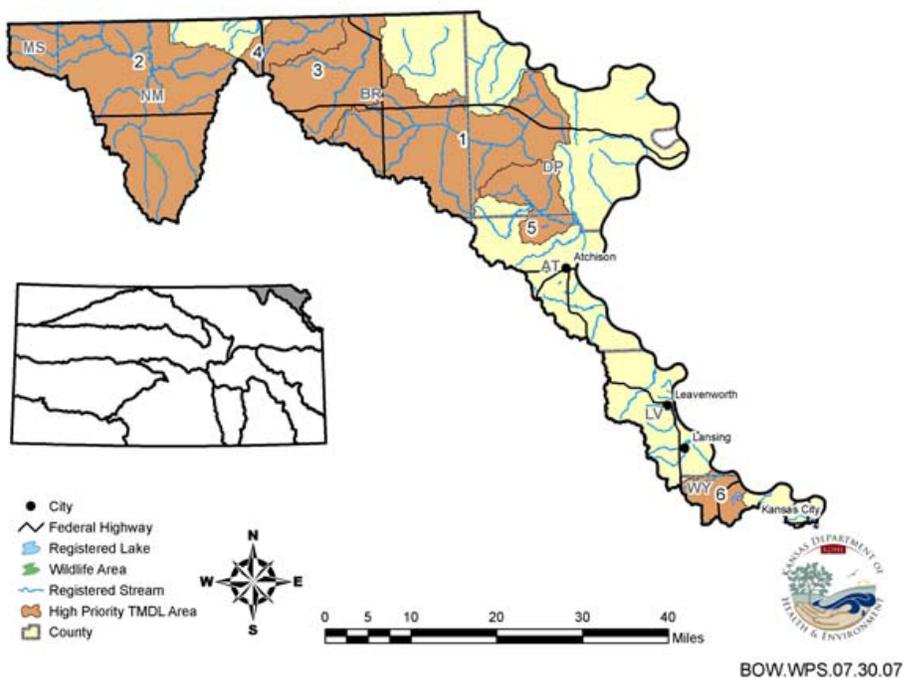
NEW MAP ID	WATERBCDY	IMPAIRMENTS	HUC11 WATERSHEDS
STREAM SEGMENTS			
1	Big Blue River	FCB	10270205(040,070)
2	Black Vermillion River	FCB	10270205(050,060)
3	Cedar Creek	FCB, Nitrate	10270104(060)
4	Clarks Creek	FCB	10270101(010)
5	Delaware River above Perry Lake	FCB	10270103(010,020,030,040)
6	Grasshopper Creek	FCB	10270103(020)
7	Kill Creek	FCB	10270104(060)
8	Little Blue River	FCB	10270207(075,085,090)
9	Lower Kansas River	ECB	10270104(020,050,060)
10	Mill Creek (JO Co.)	FCB, BIO	10270104(080)
11	Mill Creek (WB Co.)	FCB	10270102(030,040)
12	Salt Creek	FCB, DO	10250017(050)
13	Shunganunga Creek	FCB, DO	10270103(030)
14	Stranger Creek	FCB	10270104(050,040)
15	Upper Soldier Creek	Sed	10270102(030)
16	Upper Wakarusa River	FCB, Sec/TSS, Nutr/BCD	10270104(010)
17	Vermilion Creek	FCB	10270102(020)
18	Washington Creek	DO	10270104(020)
19	Wiccat Creek	FCB, DO	10270101(020)
WETLANDS			
20	Baker Wetlands	DO	10270104(020)
LAKES			
21	Cinton Lake	E	10270104(010)
7	Gardner City Lake*	DO, E	10270104(060)
3	Lake Clatwa & Cedar Lake	E	10270104(060)
22	Mission Lake	Pest, E	10270103(020)
23	Tuttle Creek Lake	Sit, Pest, E	10270205(011,031,040,050,060) 10270205(070,080,060) 10270208(071) 10270207(054,035,075,035,080)

*The lake impairment is only related to the contributing area of Gardner Lake.

Key:
 BIO: Biology
 DO: Low dissolved oxygen in upper 3 meters of water column over deepest location in water body
 E: Eutrophication: biological community impacts and excessive nutrient/organic loading. If applicable, the Eutrophication TMDLs are bundled with pH, aquatic plants, and/or DO impairments. These impairments are all interrelated and affected by nutrient loading.
 FCB: Fecal Bacteria
 FCB: Fecal Coliform Bacteria
 HUC: U.S. Geologic Survey Hydrologic Unit Code
 Nutr/BCD: Nitrogen and Phosphorus/Biochemical Oxygen Demand
 Pest: Pesticides
 TSS: Total Suspended Solids
 Sed: Sediment

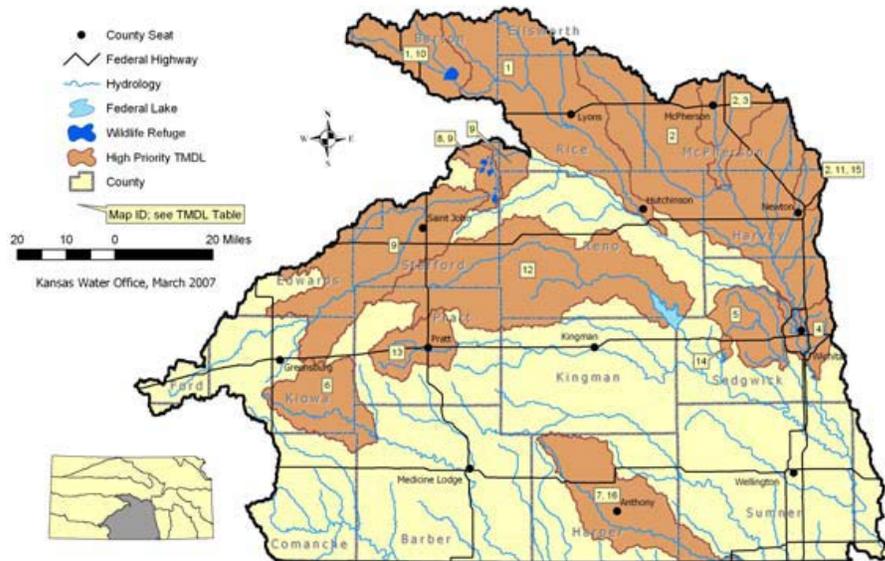
Missouri Basin

High Priority TMDL Areas



<i>MAP ID</i>	<i>WATERBODY</i>	<i>IMPAIRMENTS</i>	<i>HUC 11 WATERSHEDS</i>
STREAM SEGMENT			
1	Wolf River	FCB, BIO	10240005060
2	Big Nemaha River	FCB, BIO	10240007010
			10240007021
3	Walnut Creek	FCB	10240007030
			10240008050
LAKES			
4	Pony Creek Lake	E	10240008050
5	Atchison State Fishing Lake	E	10240011010
6	Wyandotte Co. Lake	E	10240011030
Note: For each of the high priority lakes in the basin, the TMDL only applies to the area upstream of the lake.			
Key: E: Eutrophication, biological community impacts and excessive nutrient/organic loading BIO: Biology FCB: Fecal Coliform Bacteria HUC: U.S. Geologic Survey Hydrologic Unit Code See the KDHE TMDL website for additional information ⁽¹⁾			

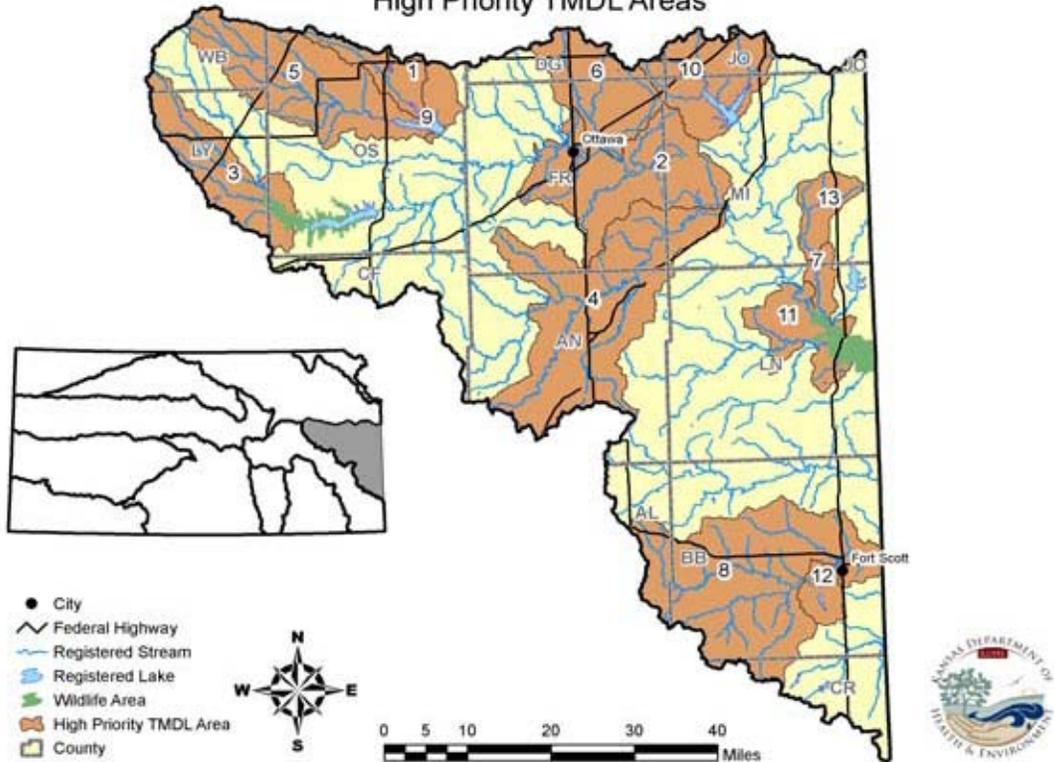
Lower Arkansas Basin Total Maximum Daily Load High Priority Areas



Map ID	Waterbody	Impairments	HUC 8 Watersheds
1	Cow Creek Watershed	BAC, DO	11030011
2	Little Arkansas River Watershed	BAC, NUTR, SILT, ATZ	11030012
3	Turkey Creek Watershed	DO	11030012
4	Arkansas River below Wichita	BAC	11030010 11030013
5	Cowskin Creek Watershed	BAC, , BIO	11030013
6	Upper Medicine Lodge River Watershed	BAC	11060003
7	Bluff Creek Watershed	BAC, DO	11060005
8	Quivira Big Salt Marsh Watershed	EUTRO	11030009
9	Quivira Little Salt Marsh Watershed	EUTRO	11030009
10	Cheyenne Bottoms Watershed	EUTRO	11030011
11	Newton City Park Lake Watershed	EUTRO	11030012
12	Cheney Lake Watershed	EUTRO, SILT	11030014
13	Pratt County Lake Watershed	EUTRO	11030015
14	Lake Afton Watershed	EUTRO	11030016
15	Sand Creek Watershed	NITRATE	11030012
16	Lake Anthony	EUTRO, SILT	11060005
<p>DO: Low dissolved oxygen in upper 3 meters of water column over deepest location in water body</p> <p>EUTRO: Eutrophication, biological community impacts and excessive nutrient/organic loading. If applicable, the Eutrophication TMDLs are bundled with pH, aquatic plants, and/or DO impairments. These impairments are all interrelated and effected by nutrient loading.</p> <p>NUTR: Nitrogen and Phosphorus</p> <p>BAC: Bacteria</p> <p>BIO: Biology impairment caused by excessive sediment, nutrients or organic matter</p> <p>ATZ: Atrazine concentrations exceed 3 ppb on annual average and in a significant number of periodic samples</p> <p>NITRATE: Nitrate concentrations exceed 10 ppb in surface water</p>			

Marais des Cygnes Basin

High Priority TMDL Areas



BOW.WPS.07.30.07

TABLE 1 MARIAS DES CYGNES BASIN HIGH PRIORITY TMDLS			
MAP ID	WATERBODY	IMPAIRMENTS	HUC 11 WATERSHEDS
STREAM SEGMENTS			
1	Hundred and Ten Mile Creek	DO	10290101030
2	Upper Marais des Cygnes River	FCB	10290101040 10290101070
3	One Hundred Forty Two Mile Creek	DO, FCB	10290101010
4	Pottawatomie Creek	DO	10290101050 10290101060
5	Dragoon Creek	DO	10290101030
6	Ottawa Creek	DO	10290101070
7	Middle Creek	DO	10290102060
8	Marmaton River	DO, BIO	10290104010 10290104020
LAKES			
9	Pomona Lake	E, Silt	10290101030
10	Hillsdale Lake	E	10290102010
11	Marais des Cygnes Wildlife Mgt. Area	DO, E, pH, Silt	10290102060 10290102070 10290102080
12	Rock Creek Lake	E	10290104010
13	Louisburg State Fishing Lake	E	10290102060

Key:
 DO: Low dissolved oxygen in upper 3 meters of water column over deepest location in water body
 BIO: Biology
 E: Eutrophication, biological community impacts and excessive nutrient/organic loading
 FCB: Fecal Coliform Bacteria
 HUC: U.S. Geologic Survey Hydrologic Unit Code
 pH: A measure of the hydrogen ion concentration.
 Silt: Observed siltation and/or chronic turbidity that impacts development of trophic state

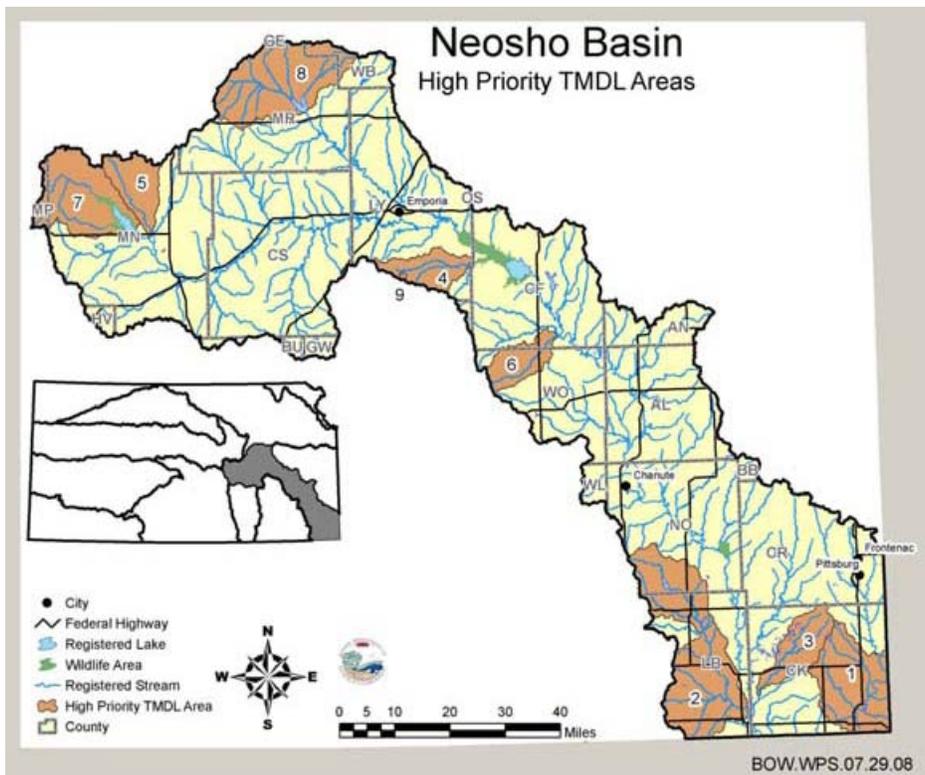
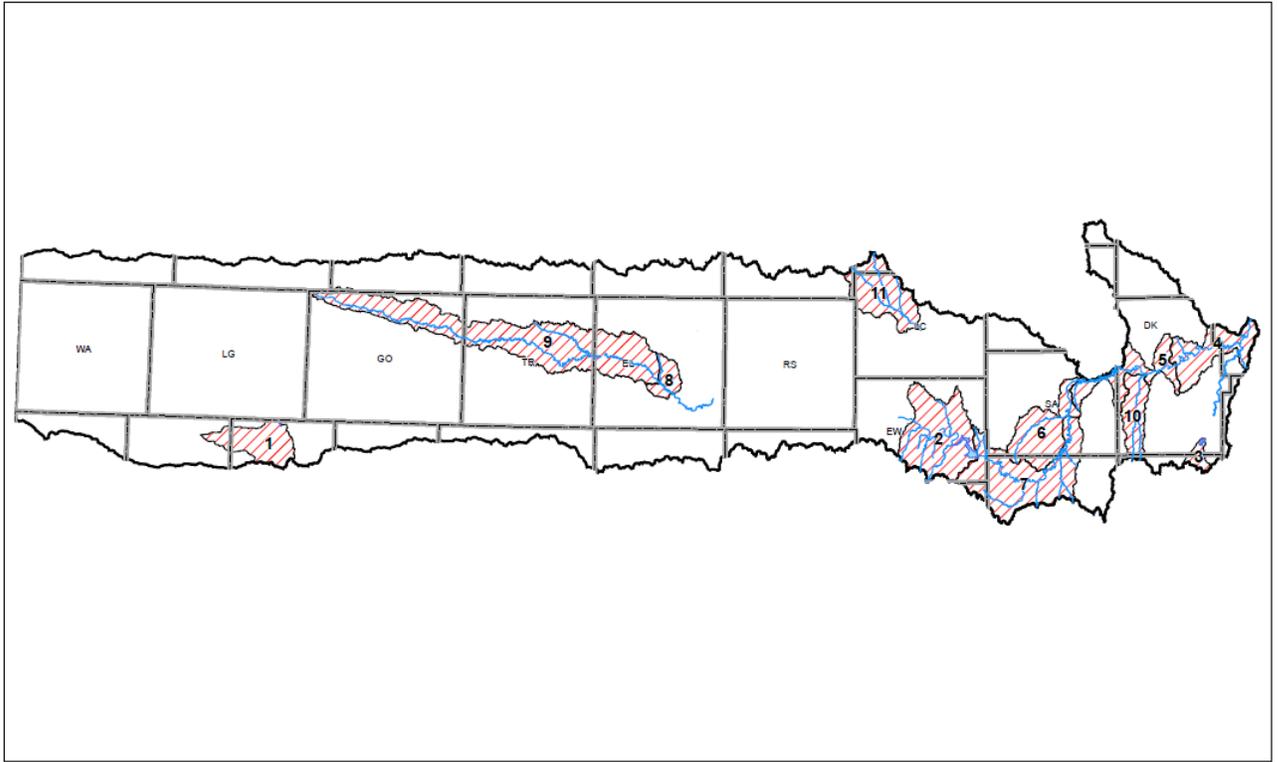


Table 1
Neosho River Basin High Priority TMDLs 2008

Map ID	Waterbody	Impairments	HUC 8 Watersheds
Stream Segments			
1	Spring River	Cd, Cu, Pb, Zn	11070207
2	Labette Creek	DO	11070205
3	Cherry Creek	DO	11070205
4	Eagle Creek	DO	11070201
5	Mud Creek	E. coli	11070202
6	Turkey Creek	E. coli	11070204
Lakes			
7	Marion Lake	E	11070202
8	Council Grove Lake	E, Silt	11070201
9	Olpe City Lake	E, Silt	11070201

Key:
 DO: Low dissolved oxygen in upper 3 meters of water column over deepest location in water body
 E: Eutrophication, biological community impacts and excessive nutrient/organic loading
 FCB: Fecal Coliform Bacteria
 E. Coli: Indicator bacteria with FCB
 HUC: U.S. Geologic Survey Hydrologic Unit Code
 Silt: Observed siltation and/or chronic turbidity that impacts development of trophic state
 Cd: Cadmium
 Pb: Lead
 Cu: Copper
 Zn: Zinc



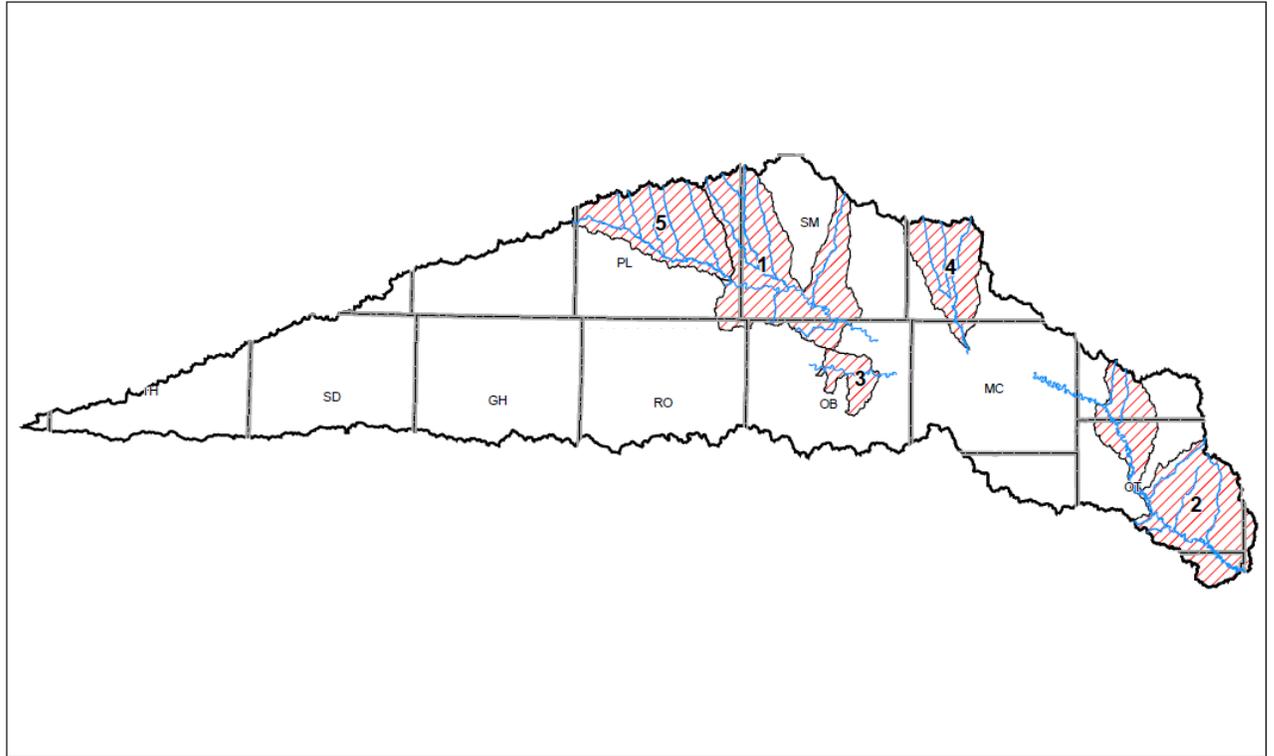
-  High Priority Stream
-  County
-  High Priority Wildlife Area/Wetland
-  High Priority Lake
-  High Priority TMDL Areas
-  Tribal Land

Smoky Hill-Saline High Priority TMDL Areas



Jun 11, 2010

Smoky Hill/ Saline			
Index	Station	Waterbody	Impairments
1	LM011201	Lake Scott State Park	Aquatic Plants, Eutrophication, pH
2	LM016001	Kanopolis Lake	Eutrophication
3	LM047201	Herington Reservoir	Dissolved Oxygen, Eutrophication
4	SC264	Smoky Hill River At Junction City	Suspended Solids
5	SC265	Smoky Hill River At Enterprise	Suspended Solids
6	SC268	Smoky Hill River Near Salina	Suspended Solids
7	SC514	Smoky Hill River Near Mentor	E. coli, Suspended Solids
8	SC540	Big Creek Near Munjor	Dissolved Oxygen, Nitrate, Total Phosphours, Suspended Solids
9	SC541	Big Creek Near Hays	Suspended Solids
10	SC642	Holland Creek Near Sand Springs	Dissolved Oxygen
11	SC673	Spillman Creek Near Lincoln	Dissolved Oxygen



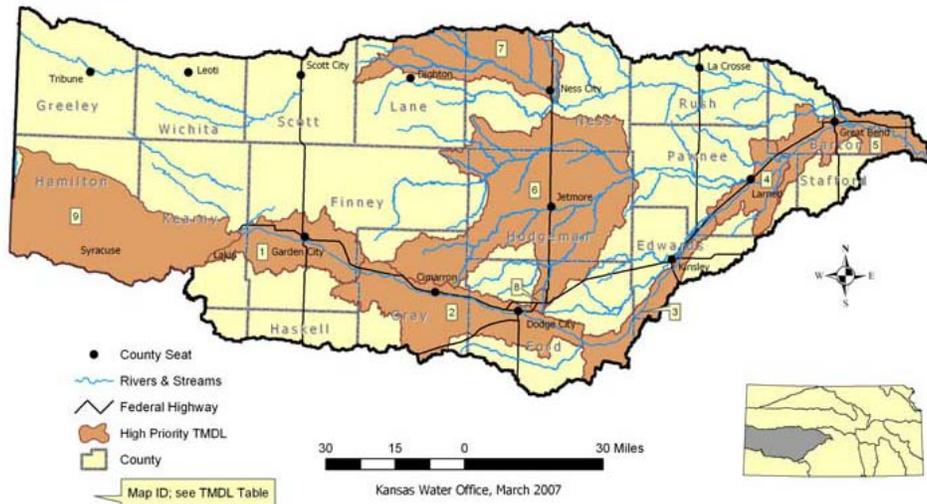
- High Priority Stream
- County
- High Priority Wildlife Area/Wetland
- High Priority Lake
- High Priority TMDL Areas
- Tribal Land

Solomon High Priority TMDL Areas

Jun 11, 2010

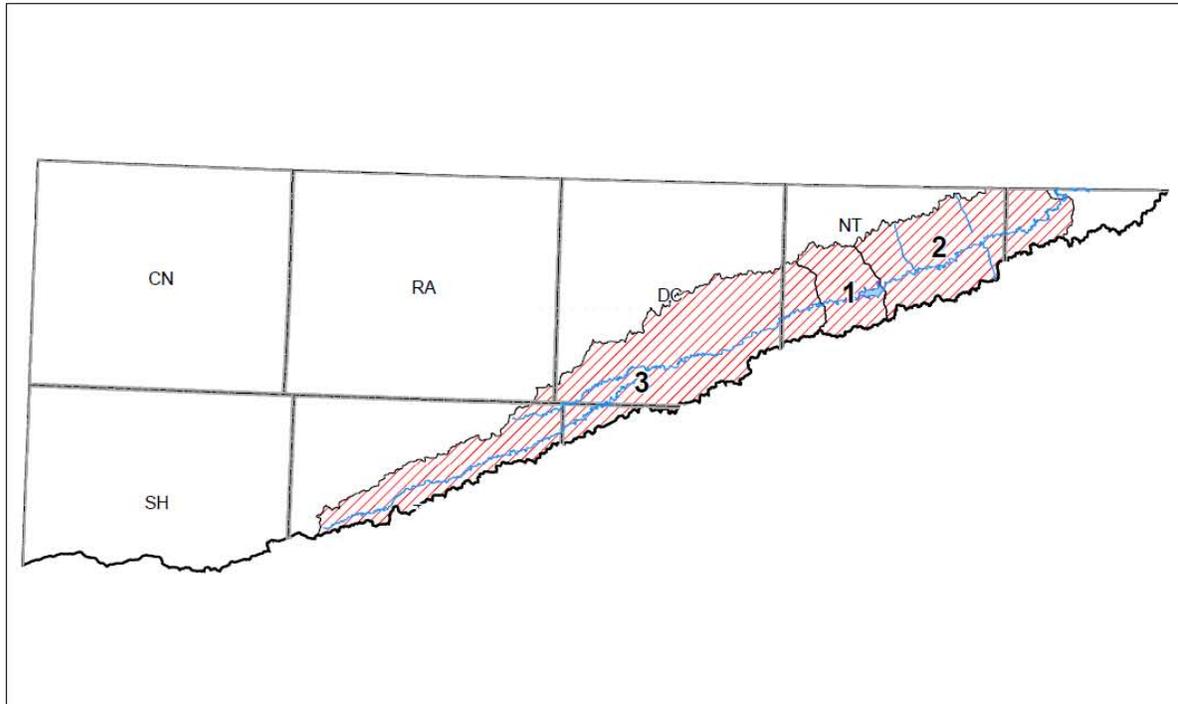
Solomon			
Index	Station	Waterbody	Impairments
1	SC014	North Fork Solomon River At Portis	E. coli
2	SC266	Solomon River At Niles	Suspended Solids
3	SC543	South Fork Solomon River Near Osborne	E. coli
4	SC667	Limestone Creek Near Glen Elder	Dissolved Oxygen
5	SC721	Deer Creek Near Kirwin	Selenium, Sulfate

Upper Arkansas Basin Total Maximum Daily Load High Priority Areas



Map ID	Waterbody	Impairments	HUC 8 Watersheds
1	Arkansas River below Garden City to Pierceville	BAC	11030001 11030003
2	Arkansas River - Garden City to Ford	BAC	11030003 11030004
3	Arkansas River - Ford to Kinsley	BAC	11030004
4	Arkansas River - Kinsley to Dundee	BAC	11030004
5	Arkansas River - Dundee to Great Bend	BAC	11030004 11030008
6	Pawnee River/Buckner Creek Watershed	BAC	11030005 11030006
7	Walnut Creek Watershed	BAC	11030007
8	Ford County Lake Watershed	EUTRO, DO, pH	11030006
9	Arkansas River from Stateline to Pierceville	SEL	11030001 11030003

DO: Low dissolved oxygen in upper 3 meters of water column over deepest location in water body
 EUTRO: Eutrophication, biological community impacts and excessive nutrient/organic loading. If applicable, the Eutrophication TMDLs are bundled with pH, aquatic plants, and/or DO impairments. These impairments are all interrelated and effected by nutrient loading.
 BAC: Bacteria
 SEL: Selenium – typically set at some natural background level that exceeds the current chronic aquatic life criterion of 5 ppb



-  High Priority Stream
-  County
-  High Priority Wildlife Area/Wetland
-  High Priority Lake
-  High Priority TMDL Areas
-  Tribal Land

Upper Republican High Priority TMDL Areas

Jun 11, 2010



Upper Republican			
Index	Station	Waterbody	Impairments
1	LM010001	Norton Lake (Sebelius Lake)	Eutrophication
2	SC230	Prairie Dog Creek Near Woodruff	Dissolved Oxygen, Total Phosphorus
3	SC549	Prairie Dog Creek Near Dellvale	Total Phosphorus

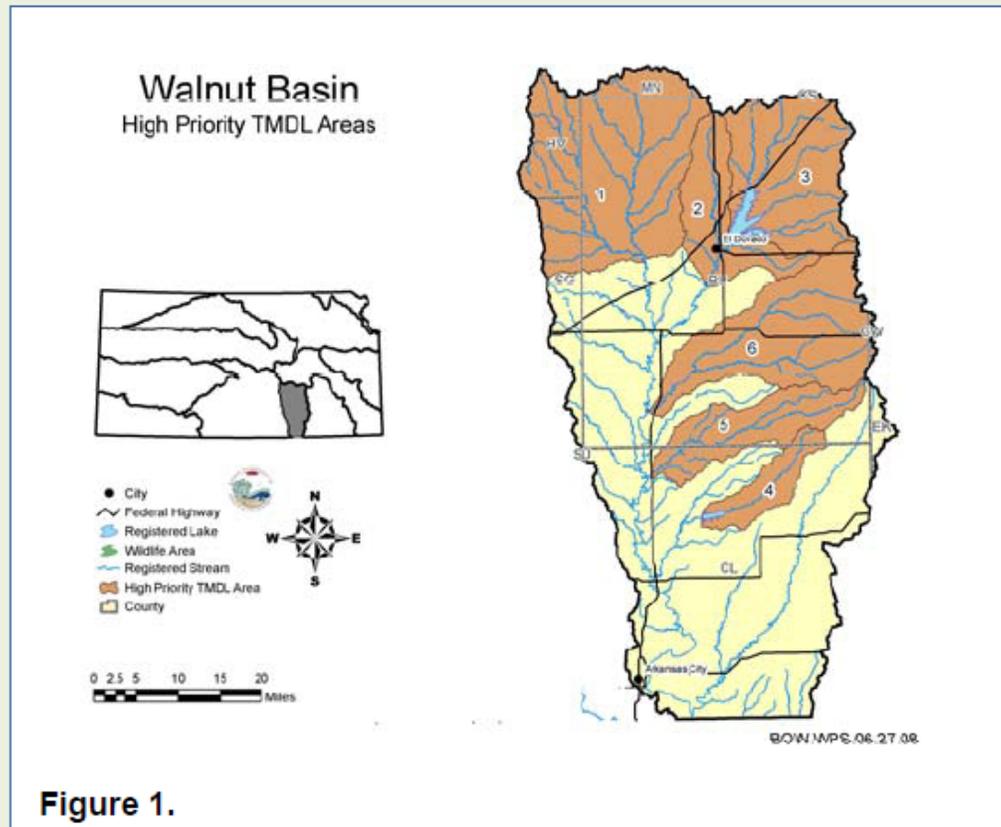


Figure 1.

TABLE 1 Walnut BASIN HIGH PRIORITY TMDLS			
MAP ID	WATERBODY	IMPAIRMENTS	HUC 11 WATERSHEDS
STREAM SEGMENTS			
1	Whitewater River	FCB	11030017
2	Upper Walnut River	FCB	11030017
5	Rock Creek	E. coli	11030018
6	Little Walnut River	E. coli	11030018
LAKES			
3	El Dorado Lake	Eutrophication	11030017
3	El Dorado Lake	Silt	11030017
4	Winfield City Lake	Eutrophication	11030018
Key:			
E:	Eutrophication, biological community impacts and excessive nutrient/organic loading		
FCB:	Fecal Coliform Bacteria		
HUC:	U.S. Geologic Survey Hydrologic Unit Code		
Silt:	Observed siltation and/or chronic turbidity that impacts development of trophic state		
E. coli	Indicator organism within FCB		

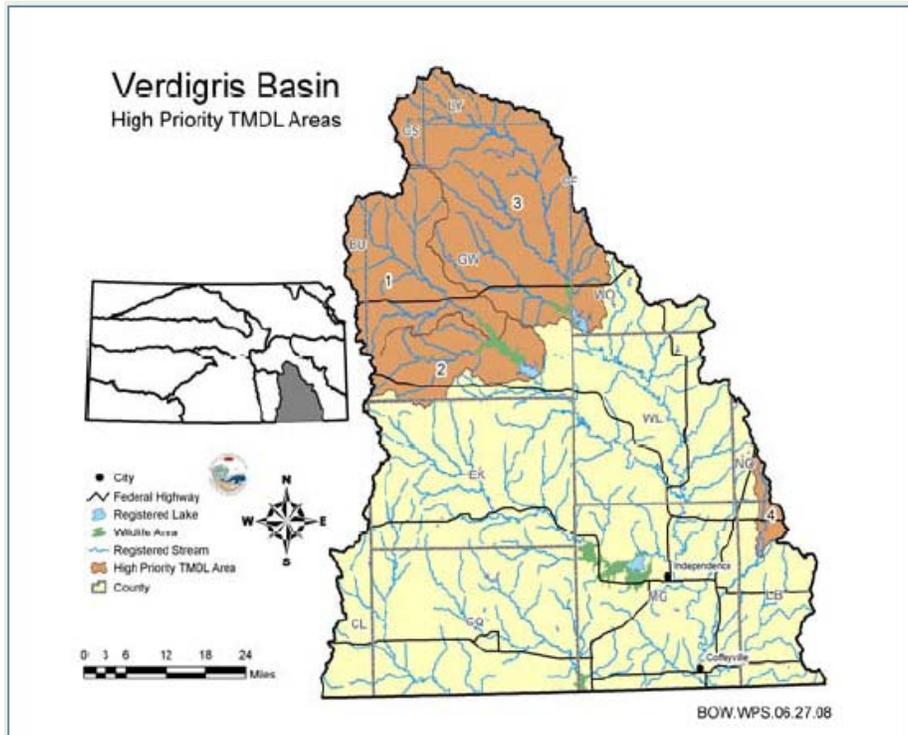


TABLE 1 VERDIGRIS BASIN HIGH PRIORITY TMDLS			
MAP ID	WATERBODY	IMPAIRMENTS	HUC 8 WATERSHEDS
STREAM SEGMENTS			
1	Fall River	FCB	11071020
LAKES			
2	Fall River Lake	E, DO, Silt	11070102
3	Toronto Lake	E, DO, Silt	11070101
4	Big Hill Lake	E	11070103
Key:			
DO:	Low dissolved oxygen in upper 3 meters of water column over deepest location in water body		
E:	Eutrophication, biological community impacts and excessive nutrient/organic loading		
FCB:	Fecal Coliform Bacteria		
HUC:	U.S. Geologic Survey Hydrologic Unit Code		
Silt:	Observed siltation and/or chronic turbidity that impacts development of trophic state		

2010 303(d) List of All Impaired/Potentially Impaired Waters Cimarron Basin

11040002

Upper Cimarron

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Point of Rocks Lake (Moss Lake West)	Aquatic Life	Eutrophication	LM060501	MT	Lake	Low	
5	Point of Rocks Lake (Moss Lake West)	Water Supply	Fluoride	LM060501	MT	Lake	Low	
5	Point of Rocks Lake (Moss Lake West)	Water Supply	Sulfate	LM060501	MT	Lake	Low	
3	Point of Rocks Lake (Moss Lake West)	Aquatic Life	Dissolved Oxygen	LM060501	MT	Lake		Small sample size, no new samples since 2005 only year with violation

11040006

Upper Cimarron-Liberal

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Cimarron River Near Forgan, Oklahoma	Aquatic Life	Selenium	SC222	ME, MT, SV, SW	Watershed	Low	
5	Cimarron River Near Forgan, Oklahoma	Aquatic Life	Total Phosphorus	SC222	ME, MT, SV, SW	Watershed	Low	median value: 0.474 > median flag value:0.201
4a	Cimarron River Near Forgan, Oklahoma	Water Supply	Chloride	SC222	ME, MT, SV, SW	Watershed	Low	TMDL Approved on 9/11/2000
4a	Cimarron River Near Forgan, Oklahoma	Aquatic Life	pH	SC222	ME, MT, SV, SW	Watershed	Low	TMDL Approved on 9/11/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Cimarron Basin

11040007

Crooked Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Lake Meade State Park	Water Supply	Fluoride	LM010601	ME	Lake	Medium	
5	Crooked Creek Near Englewood	Water Supply	Fluoride	SC600	GY, HS, ME	Watershed	Low	
4a	Lake Meade State Park	Recreation	Aquatic Plants	LM010601	ME	Lake	High	TMDL Approved on 9/11/2000
4a	Crooked Creek Near Englewood	Water Supply	Chloride	SC600	GY, HS, ME	Watershed	Low	TMDL Approved on 9/11/2000
4a	Lake Meade State Park	Aquatic Life	Dissolved Oxygen	LM010601	ME	Lake	High	TMDL Approved on 9/11/2000
4a	Lake Meade State Park	Aquatic Life	Eutrophication	LM010601	ME	Lake	High	TMDL Approved on 9/11/2000
4a	Lake Meade State Park	Aquatic Life	pH	LM010601	ME	Lake	High	TMDL Approved on 9/11/2000
3	Crooked Creek	Aquatic Life	Ammonia	NPDES22802	ME	Facility		NPDES Permit-Lagoon Study Pending

2010 303(d) List of All Impaired/Potentially Impaired Waters Cimarron Basin

11040008

Upper Cimarron-Bluff

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Bluff Creek Near Protection	Water Supply	Chloride	SC593	CA, CM	Watershed	Low	
5	Day Creek Near Sitka	Aquatic Life	Dissolved Oxygen	SC701	CA, CM	Watershed	Low	
5	Lake Coldwater	Aquatic Life	Eutrophication	LM042601	CM	Lake	Low	
5	Big Sandy Creek Near Ashland	Water Supply	Fluoride	SC738	ME, CA	Watershed	Low	
5	St. Jacobs Well (Big Basin W.A.)	Water Supply	Fluoride	LM060001	CA	Lake	Low	
5	Day Creek Near Sitka	Water Supply	Sulfate	SC701	CA, CM	Watershed	Low	Use designation changes not yet approved by EPA
4a	Big Sandy Creek Near Ashland	Water Supply	Chloride	SC738	ME, CA	Watershed	Low	TMDL Approved on 9/11/2000
4a	Cimarron River Near Protection	Water Supply	Chloride	SC592	ME, CA	Watershed	Low	TMDL Approved on 9/11/2000
4a	Day Creek Near Sitka	Water Supply	Chloride	SC701	CA, CM	Watershed	Low	TMDL Approved on 9/11/2000
4a	St. Jacobs Well (Big Basin W.A.)	Aquatic Life	Eutrophication	LM060001	CA	Lake	High	TMDL Approved on 9/11/2000
4a	Cavalry Creek Near Protection	Recreation	Fecal Coli	SC624	KW, CM	Watershed	Medium	TMDL Approved on 8/9/2000
4a	Big Sandy Creek Near Ashland	Water Supply	Sulfate	SC738	ME, CA	Watershed	Low	TMDL Approved on 9/11/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Kansas Lower Republican Basin

10250016

Middle Republican

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	White Rock Creek Near Burr Oak	Water Supply	Arsenic	SC508	JW, SM	Watershed	Low	
5	Republican River Near Hardy, Nebraska	Aquatic Life	Biology	SC231	JW, SM	Watershed	Low	
5	Lovewell Lake	Aquatic Life	Eutrophication	LM015001	JW	Lake	Low	
5	Lovewell Lake	Aquatic Life	pH	LM015001	JW	Lake	Low	
5	White Rock Creek Near Burr Oak	Water Supply	Sulfate	SC508	JW, SM	Watershed	Low	
5	Republican River Near Hardy, Nebraska	Aquatic Life	Total Phosphorus	SC231	JW, SM	Watershed	Low	median value: 0.234 > median flag value:0.201
5	White Rock Creek Near Burr Oak	Aquatic Life	Total Phosphorus	SC508	JW, SM	Watershed	Low	median value: 0.22 > median flag value:0.201
5	White Rock Creek Near Burr Oak	Aquatic Life	Total Suspended Solids	SC508	JW, SM	Watershed	Low	median value: 72 > median flag value:50
4a	Republican River Near Hardy, Nebraska	Recreation	Fecal Coli	SC231	JW, SM	Watershed	Low	TMDL Approved on 1/26/2000
4a	White Rock Creek Near Burr Oak	Recreation	Fecal Coli	SC508	JW, SM	Watershed	Low	TMDL Approved on 1/26/2000
4a	White Rock Creek Near Burr Oak	Aquatic Life	Selenium	SC508	JW, SM	Watershed	Low	TMDL Approved on 1/26/2000
3	Republican River Near Hardy, Nebraska	Aquatic Life	pH	SC231	JW, SM	Watershed		

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10250017

Lower Republican

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Republican River Near Clay Center	Aquatic Life	Biology	SC503	CY	Watershed	Low	
5	Salt Creek Near Hollis	Water Supply	Chloride	SC650	RP	Watershed	Low	
5	Elm Creek Near Ames	Aquatic Life	Copper	SC709	CD	Watershed	Low	
5	Mulberry Creek Near Clifton	Aquatic Life	Copper	SC710	CD, CY	Watershed	Low	
5	Peats Creek Near Clifton	Aquatic Life	Copper	SC649	WS	Watershed	Low	
5	Milford Lake	Aquatic Life	Dissolved Oxygen	LM019001	CY, RL, GE	Lake	Low	
5	Elm Creek Near Ames	Aquatic Life	Lead	SC709	CD	Watershed	Low	Last exceedence occurred in most current sample year:2007
5	Mulberry Creek Near Clifton	Aquatic Life	Lead	SC710	CD, CY	Watershed	Low	Recent Trends indicate concern
5	Peats Creek Near Clifton	Aquatic Life	Lead	SC649	WS	Watershed	Low	Last exceedence occurred in most current sample year:2007
5	Republican River Near Clay Center	Aquatic Life	Lead	SC504	RP, WS, CD, CY	Watershed	Low	Last exceedence occurred in most current sample year:2008
5	Republican River Near Clay Center	Aquatic Life	Lead	SC503	CY	Watershed	Low	
5	Republican River Near Rice	Aquatic Life	pH	SC510	JW, RP, CD	Watershed	Low	
5	Buffalo Creek Near Concordia	Water Supply	Sulfate	SC509	JW, CD	Watershed	Low	
5	Five Creek Near Clay Center	Water Supply	Sulfate	SC711	CD, CY	Watershed	Low	Use designation changes not yet approved by EPA

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10250017

Lower Republican

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Buffalo Creek Near Concordia	Aquatic Life	Total Phosphorus	SC509	JW, CD	Watershed	Low	median value: 0.4185 > median flag value:0.201
5	Elm Creek Near Ames	Aquatic Life	Total Phosphorus	SC709	CD	Watershed	Low	median value: 0.26 > median flag value:0.201
5	Mulberry Creek Near Clifton	Aquatic Life	Total Phosphorus	SC710	CD, CY	Watershed	Low	median value: 0.216 > median flag value:0.201
5	Peats Creek Near Clifton	Aquatic Life	Total Phosphorus	SC649	WS	Watershed	Low	median value: 0.298 > median flag value:0.201
5	Republican River Near Clay Center	Aquatic Life	Total Phosphorus	SC504	RP, WS, CD, CY	Watershed	Low	median value: 0.3175 > median flag value:0.201
5	Republican River Near Clay Center	Aquatic Life	Total Phosphorus	SC503	CY	Watershed	Low	median value: 0.311 > median flag value:0.201
5	Republican River Near Rice	Aquatic Life	Total Phosphorus	SC510	JW, RP, CD	Watershed	Low	median value: 0.283 > median flag value:0.201
5	Salt Creek Near Hollis	Aquatic Life	Total Phosphorus	SC650	RP	Watershed	Low	median value: 0.364 > median flag value:0.201
5	Wolf Creek Near Concordia	Aquatic Life	Total Phosphorus	SC707	CD	Watershed	Low	median value: 0.37 > median flag value:0.201
5	Buffalo Creek Near Concordia	Aquatic Life	Total Suspended Solids	SC509	JW, CD	Watershed	Low	median value: 68 > median flag value:50

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10250017

Lower Republican

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Republican River Near Clay Center	Aquatic Life	Total Suspended Solids	SC503	CY	Watershed	Low	median value: 61.5 > median flag value:50
5	Republican River Near Clay Center	Aquatic Life	Total Suspended Solids	SC504	RP, WS, CD, CY	Watershed	Low	median value: 83.5 > median flag value:50
5	Salt Creek Near Hollis	Aquatic Life	Total Suspended Solids	SC650	RP	Watershed	Low	median value: 60 > median flag value:50
5	Mulberry Creek Near Clifton	Aquatic Life	Zinc	SC710	CD, CY	Watershed	Low	
4a	Buffalo Creek Near Concordia	Water Supply	Chloride	SC509	JW, CD	Watershed	Low	TMDL Approved on 1/26/2000
4a	Rimrock Park Lake	Aquatic Life	Dissolved Oxygen	LM070501	GE	Lake	Medium	TMDL Approved on 8/7/2003
4a	Salt Creek Near Hollis	Aquatic Life	Dissolved Oxygen	SC650	RP	Watershed	High	TMDL Approved on 1/26/2000
4a	Belleville City Lake	Aquatic Life	Eutrophication	LM060701	RP	Lake	Low	TMDL Approved on 1/26/2000
4a	Jamestown W.A.	Aquatic Life	Eutrophication	LM052801	CD	Lake	Low	TMDL Approved on 1/26/2000
4a	Rimrock Park Lake	Aquatic Life	Eutrophication	LM070501	GE	Lake	Medium	TMDL Approved on 8/7/2003
4a	Buffalo Creek Near Concordia	Recreation	Fecal Coli	SC509	JW, CD	Watershed	Low	TMDL Approved on 1/26/2000
4a	Jamestown W.A.	Recreation	Fecal Coli	LM052801	CD	Lake	Low	TMDL Approved on 1/26/2000
4a	Republican River Near Clay Center	Recreation	Fecal Coli	SC504	RP, WS, CD, CY	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Republican River Near Clay Center	Recreation	Fecal Coli	SC503	CY	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Republican River Near Rice	Recreation	Fecal Coli	SC510	JW, RP, CD	Watershed	Medium	TMDL Approved on 1/26/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Kansas Lower Republican Basin

10250017

Lower Republican

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Salt Creek Near Hollis	Recreation	Fecal Coli	SC650	RP	Watershed	High	TMDL Approved on 1/26/2000
4a	Jamestown W.A.	Aquatic Life	pH	LM052801	CD	Lake	Low	TMDL Approved on 1/26/2000
4a	Jamestown W.A.	Water Supply	Siltation	LM052801	CD	Lake	Low	TMDL Approved on 1/26/2000
3	Buffalo Creek	Aquatic Life	Ammonia	NPDES95231	JW	Facility		NPDES Permit-Lagoon Study Pending
3	Jamestown W.A.	Water Supply	Arsenic	LM052801	CD	Lake		Small sample size
3	Wolf Creek Near Concordia	Water Supply	Arsenic	SC707	CD	Watershed		
3	Peats Creek Near Clifton	Aquatic Life	Atrazine	SC649	WS	Watershed		Last exceedence occured in most current sample year:2007

2010 303(d) List of All Impaired/Potentially Impaired Waters Kansas Lower Republican Basin

10270101

Upper Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Kansas River Near Ogden	Aquatic Life	Total Phosphorus	SC518	RL, GE	Watershed	Medium	median value: 0.2975 > median flag value:0.201
5	Kansas River Near Ogden	Aquatic Life	Total Suspended Solids	SC518	RL, GE	Watershed	Low	median value: 66.5 > median flag value:50
4a	Kansas River Near Ogden	Water Supply	Chloride	SC518	RL, GE	Watershed	Low	TMDL Approved on 1/26/2000
4a	Wildcat Creek Near Manhattan	Aquatic Life	Dissolved Oxygen	SC652	RL	Watershed	High	TMDL Approved on 1/26/2000
4a	Ogden City Lake	Aquatic Life	Eutrophication	LM011701	RL	Lake	Low	TMDL Approved on 1/26/2000
4a	Kansas River Near Ogden	Recreation	Fecal Coli	SC518	RL, GE	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Wildcat Creek Near Manhattan	Recreation	Fecal Coli	SC652	RL	Watershed	High	TMDL Approved on 1/26/2000
4a	Kansas River Near Ogden	Water Supply	Sulfate	SC518	RL, GE	Watershed	Low	TMDL Approved on 1/26/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Kansas Lower Republican Basin

10270102

Middle Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Cross Creek Near Rossville	Recreation	E. coli	SC551	JA, PT	Watershed	High	2008 Sampling confirms impairment
5	Kansas River At Willard	Recreation	E. coli	SC259	PT, SN, WB	Watershed	High	2008 Sampling confirms impairment
5	Mission Creek Near Valencia	Recreation	E. coli	SC648	SN, WB	Watershed	High	2008 Sampling confirms impairment
5	Muddy Creek Near Grantville	Recreation	E. coli	SC639	JA, JF, SN	Watershed	High	2008 Sampling confirms impairment
5	Rock Creek Near Louisville	Recreation	E. coli	SC645	PT	Watershed	High	2008 Sampling confirms impairment
5	Soldier Creek Near Topeka	Recreation	E. coli	SC239	JA, SN	Watershed	High	2008 Sampling confirms impairment
5	Lake Shawnee	Aquatic Life	Eutrophication	LM012201	SN	Lake	High	
5	Kansas River At Wamego	Aquatic Life	Total Phosphorus	SC260	RI, PT, WB	Watershed	Medium	median value: 0.288 > median flag value:0.201
5	Kansas River At Willard	Aquatic Life	Total Phosphorus	SC259	PT, SN, WB	Watershed	Medium	median value: 0.302 > median flag value:0.201
5	Halfday Creek	Aquatic Life	Biology	SB376	SN, JA	Watershed	Low	Mis-listed with SC239
5	Kansas River At Wamego	Aquatic Life	Biology	SC260	RI, PT, WB	Watershed	Low	
5	Kansas River At Willard	Aquatic Life	Biology	SC259	PT, SN, WB	Watershed	Low	SB371
5	Mission Creek Near Valencia	Aquatic Life	Biology	SC648	SN, WB	Watershed	Low	SB370
5	Vermillion Creek Near Louisville	Aquatic Life	Biology	SC520	PT, SN, WB	Watershed	Low	

2010 303(d) List of All Impaired/Potentially Impaired Waters Kansas Lower Republican Basin

10270102

Middle Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Mission Creek Near Valencia	Aquatic Life	Copper	SC648	SN, WB	Watershed	Low	
5	Pottawatomie Co. SFL #1	Aquatic Life	Dissolved Oxygen	LM012901	PT	Lake	Low	
5	Pottawatomie Co. SFL #1	Aquatic Life	Eutrophication	LM012901	PT	Lake	Low	
5	Topeka Public Golf Course Lake	Aquatic Life	Eutrophication	LM050101	SN	Lake	Low	
5	Shunganunga Creek Near Topeka	Aquatic Life	Total Phosphorus	SC238	SN	Watershed	Low	median value: 0.225 > median flag value:0.201
5	Kansas River At Wamego	Aquatic Life	Total Suspended Solids	SC260	RI, PT, WB	Watershed	Low	median value: 54 > median flag value:50
5	Kansas River At Willard	Aquatic Life	Total Suspended Solids	SC259	PT, SN, WB	Watershed	Low	median value: 67 > median flag value:50
5	Soldier Creek Near Delia	Aquatic Life	Total Suspended Solids	SC101	NM, JA	Watershed	Low	median value: 58.75 > median flag value:50
4a	Warren Park Lake	Recreation	Aquatic Plants	LM062001	SN	Lake	Low	TMDL Approved on 1/26/2000
4a	Soldier Creek Near Delia	Aquatic Life	Biology	SC101	NM, JA	Watershed	High	TMDL Approved on 8/3/2007, SB299
4a	Central Park Lake	Aquatic Life	Eutrophication	LM060901	SN	Lake	Low	TMDL Approved on 1/26/2000
4a	Gage Park Lake	Aquatic Life	Eutrophication	LM061101	SN	Lake	Low	TMDL Approved on 1/26/2000
4a	Myer's Lake	Aquatic Life	Eutrophication	LM075201	SN	Lake	Low	TMDL Approved on 1/26/2000
4a	Wamego City Lake	Aquatic Life	Eutrophication	LM062101	PT	Lake	Low	TMDL Approved on 1/26/2000
4a	Warren Park Lake	Aquatic Life	Eutrophication	LM062001	SN	Lake	Low	TMDL Approved on 1/26/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Kansas Lower Republican Basin

10270102

Middle Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Kansas River At Wamego	Recreation	Fecal Coli	SC260	RI, PT, WB	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Muddy Creek Near Grantville	Recreation	Fecal Coli	SC639	JA, JF, SN	Watershed	Medium	TMDL Approved on 1/26/2000, 2008 Sampling confirms impairment
4a	Shunganunga Creek Near Topeka	Recreation	Fecal Coli	SC238	SN	Watershed	High	TMDL Approved on 1/26/2000
4a	Vermillion Creek Near Louisville	Recreation	Fecal Coli	SC520	PT, SN, WB	Watershed	High	TMDL Approved on 1/26/2000
4a	Vermillion Creek Near Onaga	Recreation	Fecal Coli	SC681	NM, PT	Watershed	High	TMDL Approved on 1/26/2000
3	Illinois Creek Near Alma	Aquatic Life	Biology	SC726	WB	Watershed		Small sample size
3	West Branch Mill Creek Near Alma	Aquatic Life	Biology	SC506	GE, WB	Watershed	Low	Small sample size, SB726
3	Shunganunga Creek Near Topeka	Aquatic Life	Diazinon	SC238	SN	Watershed		
3	Alma City Lake	Aquatic Life	Eutrophication	LM050001	WB	Lake		Small sample size
3	Wabaunsee Co. Lake	Aquatic Life	Eutrophication	LM042001	WB	Lake		2008 chlorophyll levels acceptable
3	Kansas River At Willard	Aquatic Life	Lead	SC259	PT, SN, WB	Watershed		
3	Pillsbury Crossing W.A.	Food Procurement	Mercury	LM020301	RL	Lake		Isolated Violation
3	Wamego City Lake	Food Procurement	Mercury	LM062101	PT	Lake		Isolated Violation
3	Myer's Lake	Aquatic Life	pH	LM075201	SN	Lake		Small sample size

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10270103

Delaware

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Perry Lake	Aquatic Life	Eutrophication	LM029001	JA, JF	Lake	High	
5	Perry W.A. Wetland	Aquatic Life	Eutrophication	LM029041	JF	Lake	High	
5	Mission Lake	Water Supply	Siltation	LM013601	BR	Lake	High	
5	Delaware River Near Half Mound	Aquatic Life	Total Phosphorus	SC554	NM, BR, JA, AT	Watershed	High	median value: 0.2045 > median flag value:0.201
5	Elk Creek Near Larkinburg	Aquatic Life	Total Phosphorus	SC604	JA, PT	Watershed	High	median value: 0.243 > median flag value:0.201
5	Grasshopper Creek Near Muscotah	Aquatic Life	Total Phosphorus	SC603	BR, AT	Watershed	High	median value: 0.2145 > median flag value:0.201
5	Grasshopper Creek Near Muscotah	Aquatic Life	Atrazine	SC603	BR, AT	Watershed	Low	
5	Grasshopper Creek Near Muscotah	Aquatic Life	Copper	SC603	BR, AT	Watershed	Low	
5	Perry W.A. Wetland	Aquatic Life	Dissolved Oxygen	LM029041	JF	Lake	Low	
5	Atchison Co. Park Lake	Aquatic Life	Eutrophication	LM060601	AT	Lake	Low	
5	Elkhorn Lake	Aquatic Life	Eutrophication	LM061001	JA	Lake	Low	
5	Nebo SFL	Aquatic Life	Eutrophication	LM061501	JA	Lake	Low	
5	Atchison Co. Park Lake	Water Supply	Siltation	LM060601	AT	Lake	Low	
4a	Mission Lake	Aquatic Life	Atrazine	LM013601	BR	Lake	High	TMDL Approved on 1/26/2000
4a	Little Lake	Aquatic Life	Eutrophication	LM062601	BR	Lake	Low	TMDL Approved on 1/26/2000
4a	Mission Lake	Aquatic Life	Eutrophication	LM013601	BR	Lake	High	TMDL Approved on 1/26/2000

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10270103

Delaware

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Sabetha Watershed Lake (Niehues)	Aquatic Life	Eutrophication	LM075101	NM	Lake	Low	TMDL Approved on 1/26/2000
4a	Delaware River Near Half Mound	Recreation	Fecal Coli	SC554	NM, BR, JA, AT	Watershed	High	TMDL Approved on 1/26/2000
4a	Elk Creek Near Larkinburg	Recreation	Fecal Coli	SC604	JA, PT	Watershed	High	TMDL Approved on 1/26/2000
4a	Grasshopper Creek Near Muscotah	Recreation	Fecal Coli	SC603	BR, AT	Watershed	High	TMDL Approved on 1/26/2000
4a	Straight Creek Near Larkinburg	Recreation	Fecal Coli	SC686	NM, JA	Watershed	High	TMDL Approved on 1/26/2000
3	Delaware River Near Half Mound	Aquatic Life	Biology	SC554	NM, BR, JA, AT	Watershed		Small sample size, SB360
3	Lake Jayhawk	Aquatic Life	Eutrophication	LM039701	JF	Lake		Small sample size
3	Prairie Lake	Aquatic Life	Eutrophication	LM061901	JA	Lake		Small sample size

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10270104

Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Kansas River At Desoto	Aquatic Life	Total Phosphorus	SC254	LV, JO	Watershed	Medium	median value: 0.367 > median flag value:0.201
5	Kansas River At Eudora	Aquatic Life	Total Phosphorus	SC255	JF, LV, DG	Watershed	Medium	median value: 0.313 > median flag value:0.201
5	Kansas River At Kansas City, Kansas	Aquatic Life	Total Phosphorus	SC203	LV, WY, JO	Watershed	Medium	median value: 0.383 > median flag value:0.201
5	Kansas River At Lecompton	Aquatic Life	Total Phosphorus	SC257	JF, SN, DG	Watershed	Medium	median value: 0.336 > median flag value:0.201
5	Turkey Creek	Aquatic Life	Ammonia	NPDES55492	JO	Facility	Low	NPDES Permit Resides with EPA
5	Captain Creek Near Eudora	Aquatic Life	Atrazine	SC638	DG, JO	Watershed	Low	Last exceedence occurred in most current sample year:2007
5	Crooked Creek Near Winchester	Aquatic Life	Atrazine	SC683	JF	Watershed	Low	
5	Kill Creek At Desoto	Aquatic Life	Atrazine	SC253	JO	Watershed	Low	Recent Trends Do Not Indicate Concern
5	Stranger Creek Near Easton	Aquatic Life	Atrazine	SC602	AT, JF, LV	Watershed	Low	
5	Stranger Creek Near Linwood	Aquatic Life	Atrazine	SC501	LV	Watershed	Low	
5	Stranger Creek Near Easton	Aquatic Life	Biology	SC602	AT, JF, LV	Watershed	Low	SB378
5	Stranger Creek Near Linwood	Aquatic Life	Biology	SC501	LV	Watershed	Low	SB378
5	Kansas River At Eudora	Aquatic Life	Copper	SC255	JF, LV, DG	Watershed	Low	

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10270104

Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Stranger Creek Near Easton	Aquatic Life	Copper	SC602	AT, JF, LV	Watershed	Low	
5	Coal Creek Near Sibleyville	Aquatic Life	Dissolved Oxygen	SC679	DG	Watershed	Low	
5	Baker Wetlands	Aquatic Life	Eutrophication	LM014401	DG	Wetland	Low	
5	Douglas Co. SFL	Aquatic Life	Eutrophication	LM011301	DG	Lake	Low	
5	Leavenworth Co. SFL	Aquatic Life	Eutrophication	LM012301	LV	Lake	Low	
5	Rose's Lake	Aquatic Life	Eutrophication	LM062501	JO	Lake	Low	
5	Strowbridge Reservoir	Aquatic Life	Eutrophication	LM051201	OS	Lake	Low	
5	Baker Wetlands	Aquatic Life	Lead	LM014401	DG	Wetland	Low	
5	Kansas River At Eudora	Aquatic Life	Lead	SC255	JF, LV, DG	Watershed	Low	
5	Kansas River At Kansas City, Kansas	Aquatic Life	Lead	SC203	LV, WY, JO	Watershed	Low	
5	Nine Mile Creek Near Linwood	Aquatic Life	Lead	SC680	JF, LV, DG	Watershed	Low	Recent Trends Do Not Indicate Concern
5	Stranger Creek Near Easton	Aquatic Life	Lead	SC602	AT, JF, LV	Watershed	Low	
5	Stranger Creek Near Linwood	Aquatic Life	Lead	SC501	LV	Watershed	Low	
5	Kansas River At Eudora	Food Procurement	PCB	SC255	JF, LV, DG	Watershed	Low	Fish consumption advisory
5	Baker Wetlands	Aquatic Life	pH	LM014401	DG	Wetland	Low	
5	Cedar Creek Near Cedar Junction	Aquatic Life	Total Phosphorus	SC252	JO	Watershed	Low	median value: 0.627 > median flag value:0.201
5	Crooked Creek Near Winchester	Aquatic Life	Total Phosphorus	SC683	JF	Watershed	Low	median value: 0.227 > median flag value:0.201
5	Mill Creek Near Shawnee	Aquatic Life	Total Phosphorus	SC251	JO	Watershed	Low	median value: 0.4 > median flag value:0.201

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10270104

Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Nine Mile Creek Near Linwood	Aquatic Life	Total Phosphorus	SC680	JF, LV, DG	Watershed	Low	
5	Stranger Creek Near Easton	Aquatic Life	Total Phosphorus	SC602	AT, JF, LV	Watershed	Low	median value: 0.22 > median flag value:0.201
5	Kansas River At Desoto	Aquatic Life	Total Suspended Solids	SC254	LV, JO	Watershed	Low	median value: 101 > median flag value:50
5	Kansas River At Eudora	Aquatic Life	Total Suspended Solids	SC255	JF, LV, DG	Watershed	Low	median value: 110 > median flag value:50
5	Kansas River At Kansas City, Kansas	Aquatic Life	Total Suspended Solids	SC203	LV, WY, JO	Watershed	Low	median value: 87 > median flag value:50
5	Kansas River At Lecompton	Aquatic Life	Total Suspended Solids	SC257	JF, SN, DG	Watershed	Low	median value: 92 > median flag value:50
5	Stranger Creek Near Easton	Aquatic Life	Total Suspended Solids	SC602	AT, JF, LV	Watershed	Low	median value: 99 > median flag value:50
5	Wakarusa River Near Eudora	Aquatic Life	Total Suspended Solids	SC500	DG	Watershed	Low	median value: 53 > median flag value:50
4a	Lakeview Estates Lake	Recreation	Aquatic Plants	LM075301	SN	Lake	Low	TMDL Approved on 1/26/2000
4a	Crooked Creek Near Winchester	Aquatic Life	Biology	SC683	JF	Watershed	Low	TMDL Approved on 1/26/2000
4a	Kansas River At Desoto	Aquatic Life	Biology	SC254	LV, JO	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Kansas River At Eudora	Aquatic Life	Biology	SC255	JF, LV, DG	Watershed	Medium	TMDL Approved on 1/26/2000, SB257
4a	Kansas River At Kansas City, Kansas	Aquatic Life	Biology	SC203	LV, WY, JO	Watershed	Medium	TMDL Approved on 1/26/2000

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10270104

Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Kansas River At Lecompton	Aquatic Life	Biology	SC257	JF, SN, DG	Watershed	Medium	TMDL Approved on 1/26/2000, SB257 & SB372
4a	Mill Creek Near Shawnee	Aquatic Life	Biology	SC251	JO	Watershed	High	TMDL Approved on 8/3/2007
4a	Wakarusa River Near Topeka	Aquatic Life	Biology	SC109	SN, OS	Watershed	High	TMDL Approved on 1/26/2000
4a	Kansas River At Desoto	Aquatic Life	Biology/Sediment	SC254	LV, JO	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Kansas River At Kansas City, Kansas	Aquatic Life	Biology/Sediment	SC203	LV, WY, JO	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Mill Creek Near Shawnee	Aquatic Life	Biology/Sediment	SC251	JO	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Wakarusa River Near Topeka	Aquatic Life	Biology/Sediment	SC109	SN, OS	Watershed	High	TMDL Approved on 1/26/2000
4a	Mill Creek Near Shawnee	Water Supply	Chloride	SC251	JO	Watershed	Low	TMDL Approved on 1/26/2000
4a	Baker Wetlands	Aquatic Life	Dissolved Oxygen	LM014401	DG	Wetland	High	TMDL Approved on 1/26/2000
4a	Gardner City Lake	Aquatic Life	Dissolved Oxygen	LM040401	JO	Lake	High	TMDL Approved on 1/26/2000
4a	Mary's Lake	Aquatic Life	Dissolved Oxygen	LM061401	DG	Lake	Medium	TMDL Approved on 1/26/2000
4a	Sunflower Park Lake	Aquatic Life	Dissolved Oxygen	LM073601	JO	Lake	Medium	TMDL Approved on 1/26/2000
4a	Washington Creek Near Lawrence	Aquatic Life	Dissolved Oxygen	SC678	DG	Watershed	High	TMDL Approved on 1/26/2000
4a	Cedar Creek Near Cedar Junction	Recreation	E. coli	SC252	JO	Watershed	High	TMDL Approved on 1/16/2008
4a	Kansas River At Desoto	Recreation	E. coli	SC254	LV, JO	Watershed	High	TMDL Approved on 1/16/2008

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Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Kansas River At Eudora	Recreation	E. coli	SC255	JF, LV, DG	Watershed	High	TMDL Approved on 1/16/2008
4a	Kansas River At Kansas City, Kansas	Recreation	E. coli	SC203	LV, WY, JO	Watershed	High	TMDL Approved on 1/16/2008
4a	Kansas River At Lecompton	Recreation	E. coli	SC257	JF, SN, DG	Watershed	High	TMDL Approved on 1/16/2008
4a	Kill Creek At Desoto	Recreation	E. coli	SC253	JO	Watershed	High	TMDL Approved on 1/16/2008
4a	Mill Creek Near Shawnee	Recreation	E. coli	SC251	JO	Watershed	High	TMDL Approved on 1/16/2008
4a	Stranger Creek Near Linwood	Recreation	E. coli	SC501	LV	Watershed	High	TMDL Approved on 1/16/2008
4a	Wakarusa River Near Eudora	Recreation	E. coli	SC500	DG	Watershed	High	TMDL Approved on 1/16/2008
4a	Cedar Lake	Aquatic Life	Eutrophication	LM061601	JO	Lake	High	TMDL Approved on 9/28/2007
4a	Clinton Lake	Aquatic Life	Eutrophication	LM030001	SN, DG, OS	Lake	High	TMDL Approved on 1/26/2000
4a	Frisco Lake	Aquatic Life	Eutrophication	LM065201	JO	Lake	Low	TMDL Approved on 1/26/2000
4a	Gardner City Lake	Aquatic Life	Eutrophication	LM040401	JO	Lake	High	TMDL Approved on 1/26/2000
4a	Lakeview Estates Lake	Aquatic Life	Eutrophication	LM075301	SN	Lake	Low	TMDL Approved on 1/26/2000
4a	Lone Star Lake	Aquatic Life	Eutrophication	LM011401	DG	Lake	Low	TMDL Approved on 1/26/2000
4a	Mary's Lake	Aquatic Life	Eutrophication	LM061401	DG	Lake	Medium	TMDL Approved on 1/26/2000
4a	New Olathe Lake	Aquatic Life	Eutrophication	LM061301	JO	Lake	High	TMDL Approved on 9/28/2007

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Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Olathe Waterworks Lakes	Aquatic Life	Eutrophication	LM062201	JO	Lake	Low	TMDL Approved on 1/26/2000
4a	Pierson Park Lake	Aquatic Life	Eutrophication	LM061801	WY	Lake	Low	TMDL Approved on 1/26/2000
4a	Potter's Lake	Aquatic Life	Eutrophication	LM073401	DG	Lake	Low	TMDL Approved on 1/26/2000
4a	Sunflower Park Lake	Aquatic Life	Eutrophication	LM073601	JO	Lake	Medium	TMDL Approved on 1/26/2000
4a	Buck Creek Near Williamstown	Recreation	Fecal Coli	SC677	JF	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Coal Creek Near Sibleyville	Recreation	Fecal Coli	SC679	DG	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Nine Mile Creek Near Linwood	Recreation	Fecal Coli	SC680	JF, LV, DG	Watershed	High	TMDL Approved on 1/26/2000
4a	Stranger Creek Near Easton	Recreation	Fecal Coli	SC602	AT, JF, LV	Watershed	High	TMDL Approved on 1/26/2000
4a	Wakarusa River Near Topeka	Recreation	Fecal Coli	SC109	SN, OS	Watershed	High	TMDL Approved on 1/26/2000
4a	Cedar Creek Near Cedar Junction	Water Supply	Nitrate	SC252	JO	Watershed	High	TMDL Approved on 8/3/2007
4a	Mary's Lake	Aquatic Life	pH	LM061401	DG	Lake	Medium	TMDL Approved on 1/26/2000
4a	Potter's Lake	Aquatic Life	pH	LM073401	DG	Lake	Low	TMDL Approved on 1/26/2000
3	Upper Wakarusa River	Aquatic Life	Ammonia	NPDES94650	SN	Facility		NPDES Permit-Lagoon Study Pending
3	Captain Creek Near Eudora	Aquatic Life	Copper	SC638	DG, JO	Watershed		

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Lower Kansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Gardner City Lake	Aquatic Life	Copper	LM040401	JO	Lake		Two most recent samples (2006, 2009) show no impairment
3	Mill Creek Near Shawnee	Aquatic Life	Diazinon	SC251	JO	Watershed	Low	
3	Antioch Park Lake	Aquatic Life	Eutrophication	LM067701	JO	Lake		Small sample size

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10270205

Lower Big Blue

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Big Blue River Near Oketo	Aquatic Life	Biology	SC233	MS	Watershed	Low	
5	Black Vermillion River Near Frankfort	Aquatic Life	Biology	SC505	MS,NM	Watershed	Low	SB128
5	Big Blue River Near Blue Rapids	Aquatic Life	Copper	SC240	MS	Watershed	Low	
5	Big Blue River Near Oketo	Aquatic Life	Copper	SC233	MS	Watershed	Low	
5	Black Vermillion River Near Frankfort	Aquatic Life	Copper	SC505	MS,NM	Watershed	Low	Recent Trends indicate concern
5	Big Blue River Near Blue Rapids	Aquatic Life	Lead	SC240	MS	Watershed	Low	
5	Big Blue River Near Oketo	Aquatic Life	Lead	SC233	MS	Watershed	Low	
5	Horseshoe Creek Near Marysville	Aquatic Life	Lead	SC717	MR, CS	Watershed	Low	Recent Trends Do Not Indicate Concern
5	Big Blue River Near Blue Rapids	Aquatic Life	pH	SC240	MS	Watershed	Low	
5	Big Blue River Near Oketo	Aquatic Life	pH	SC233	MS	Watershed	Low	
5	Fancy Creek Near Randolph	Water Supply	Sulfate	SC502	WS, CY, RL	Watershed	Low	
5	Horseshoe Creek Near Marysville	Water Supply	Sulfate	SC717	MR, CS	Watershed	Low	
5	Big Blue River Near Blue Rapids	Aquatic Life	Total Phosphorus	SC240	MS	Watershed	Low	median value: 0.613 > median flag value:0.201
5	Big Blue River Near Oketo	Aquatic Life	Total Phosphorus	SC233	MS	Watershed	Low	median value: 0.8665 > median flag value:0.201
5	Black Vermillion River Near Frankfort	Aquatic Life	Total Phosphorus	SC505	MS,NM	Watershed	Low	median value: 0.259 > median flag value:0.201

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10270205

Lower Big Blue

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Horseshoe Creek Near Marysville	Aquatic Life	Total Phosphorus	SC717	MR, CS	Watershed	Low	median value: 0.287 > median flag value:0.201
5	North Elm Creek Near Oketo	Aquatic Life	Total Phosphorus	SC731	MS, NM	Watershed	Low	median value: 0.202 > median flag value:0.201
5	Big Blue River Near Blue Rapids	Aquatic Life	Total Suspended Solids	SC240	MS	Watershed	Low	median value: 101 > median flag value:50
5	Big Blue River Near Oketo	Aquatic Life	Total Suspended Solids	SC233	MS	Watershed	Low	median value: 108.5 > median flag value:50
5	Black Vermillion River Near Frankfort	Aquatic Life	Total Suspended Solids	SC505	MS,NM	Watershed	Low	median value: 55 > median flag value:50
5	Horseshoe Creek Near Marysville	Aquatic Life	Total Suspended Solids	SC717	MR, CS	Watershed	Low	
4a	Tuttle Creek Lake	Aquatic Life	Alachlor	LM021001	MS, RL, PT	Lake	High	TMDL Approved on 1/26/2000
4a	Centralia Lake	Recreation	Aquatic Plants	LM073701	NM	Lake	Medium	TMDL Approved on 1/26/2000
4a	Big Blue River Near Blue Rapids	Aquatic Life	Atrazine	SC240	MS	Watershed	High	TMDL Approved on 8/3/2007
4a	Big Blue River Near Oketo	Aquatic Life	Atrazine	SC233	MS	Watershed	High	TMDL Approved on 8/3/2007
4a	Black Vermillion River Near Frankfort	Aquatic Life	Atrazine	SC505	MS,NM	Watershed	High	TMDL Approved on 8/3/2007
4a	Fancy Creek Near Randolph	Aquatic Life	Atrazine	SC502	WS, CY, RL	Watershed	High	TMDL Approved on 8/3/2007
4a	Horseshoe Creek Near Marysville	Aquatic Life	Atrazine	SC717	MR, CS	Watershed	High	TMDL Approved on 8/3/2007

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Lower Big Blue

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	North Elm Creek Near Oketo	Aquatic Life	Atrazine	SC731	MS, NM	Watershed	High	TMDL Approved on 8/3/2007
4a	Tuttle Creek Lake	Aquatic Life	Atrazine	LM021001	MS, RL, PT	Lake	High	TMDL Approved on 8/3/2007
4a	Centralia Lake	Aquatic Life	Eutrophication	LM073701	NM	Lake	Medium	TMDL Approved on 1/26/2000
4a	Tuttle Creek Lake	Aquatic Life	Eutrophication	LM021001	MS, RL, PT	Lake	High	TMDL Approved on 1/26/2000
4a	Big Blue River Near Blue Rapids	Recreation	Fecal Coli	SC240	MS	Watershed	High	TMDL Approved on 1/26/2000
4a	Big Blue River Near Oketo	Recreation	Fecal Coli	SC233	MS	Watershed	High	TMDL Approved on 1/26/2000
4a	Black Vermillion River Near Frankfort	Recreation	Fecal Coli	SC505	MS, NM	Watershed	High	TMDL Approved on 1/26/2000
4a	Fancy Creek Near Randolph	Recreation	Fecal Coli	SC502	WS, CY, RL	Watershed	Medium	TMDL Approved on 1/26/2000
4a	Horseshoe Creek Near Marysville	Recreation	Fecal Coli	SC717	MR, CS	Watershed	Low	TMDL Approved on 1/26/2000
4a	Centralia Lake	Aquatic Life	pH	LM073701	NM	Lake	Medium	TMDL Approved on 1/26/2000
4a	Tuttle Creek Lake	Water Supply	Siltation	LM021001	MS, RL, PT	Lake	High	TMDL Approved on 1/26/2000
3	Rocky Ford W.A.	Food Procurement	Mercury	LM020601	RL	Lake		Small sample size

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10270207

Lower Little Blue

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Little Blue River Near Hollenberg	Aquatic Life	Biology	SC232	RP, WS	Watershed	Low	
5	Little Blue River Near Hollenberg	Aquatic Life	Copper	SC232	RP, WS	Watershed	Low	
5	Little Blue River Near Waterville	Aquatic Life	Copper	SC741	WS, MS	Watershed	Low	
5	Mill Creek Near Hanover	Aquatic Life	Copper	SC507	RP, WS	Watershed	Low	Recent Trends indicate concern
5	Rose Creek Near Narka	Aquatic Life	Copper	SC712	RP	Watershed	Low	
5	Washington Co. SFL	Aquatic Life	Eutrophication	LM010901	WS	Lake	Low	
5	Little Blue River Near Hollenberg	Aquatic Life	Lead	SC232	RP, WS	Watershed	Low	
5	Little Blue River Near Waterville	Aquatic Life	Lead	SC741	WS, MS	Watershed	Low	
5	Mill Creek Near Hanover	Aquatic Life	Lead	SC507	RP, WS	Watershed	Low	
5	Rose Creek Near Narka	Aquatic Life	Lead	SC712	RP	Watershed	Low	
5	Washington W.A.	Aquatic Life	Lead	LM010941	WS	Lake	Low	
5	Little Blue River Near Hollenberg	Aquatic Life	pH	SC232	RP, WS	Watershed	Low	
5	Little Blue River Near Hollenberg	Aquatic Life	Total Phosphorus	SC232	RP, WS	Watershed	Low	median value: 0.389 > median flag value:0.201
5	Little Blue River Near Waterville	Aquatic Life	Total Phosphorus	SC741	WS, MS	Watershed	Low	median value: 0.337 > median flag value:0.201
5	Rose Creek Near Narka	Aquatic Life	Total Phosphorus	SC712	RP	Watershed	Low	median value: 0.407 > median flag value:0.201
5	Little Blue River Near Hollenberg	Aquatic Life	Total Suspended Solids	SC232	RP, WS	Watershed	Low	median value: 53 > median flag value:50

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10270207

Lower Little Blue

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Little Blue River Near Waterville	Aquatic Life	Total Suspended Solids	SC741	WS, MS	Watershed	Low	
5	Mill Creek Near Hanover	Aquatic Life	Total Suspended Solids	SC507	RP, WS	Watershed	Low	median value: 52 > median flag value:50
5	Rose Creek Near Narka	Aquatic Life	Total Suspended Solids	SC712	RP	Watershed	Low	
4a	Washington Co. SFL	Recreation	Aquatic Plants	LM010901	WS	Lake	Low	TMDL Approved on 1/26/2000
4a	Little Blue River Near Hollenberg	Aquatic Life	Atrazine	SC232	RP, WS	Watershed	High	TMDL Approved on 8/3/2007
4a	Little Blue River Near Waterville	Aquatic Life	Atrazine	SC741	WS, MS	Watershed	High	TMDL Approved on 8/3/2007
4a	Mill Creek Near Hanover	Aquatic Life	Atrazine	SC507	RP, WS	Watershed	High	TMDL Approved on 8/3/2007
4a	Rose Creek Near Narka	Aquatic Life	Atrazine	SC712	RP	Watershed	High	TMDL Approved on 8/3/2007
4a	Washington Co. SFL	Aquatic Life	Dissolved Oxygen	LM010901	WS	Lake	Low	TMDL Approved on 1/26/2000
4a	Lake Idlewild	Aquatic Life	Eutrophication	LM061201	MS	Lake	Low	TMDL Approved on 1/26/2000
4a	Washington W.A.	Aquatic Life	Eutrophication	LM010941	WS	Lake	Low	TMDL Approved on 1/26/2000
4a	Little Blue River Near Hollenberg	Recreation	Fecal Coli	SC232	RP, WS	Watershed	High	TMDL Approved on 1/26/2000
4a	Little Blue River Near Waterville	Recreation	Fecal Coli	SC741	WS, MS	Watershed	High	TMDL Approved on 1/26/2000
4a	Mill Creek Near Hanover	Recreation	Fecal Coli	SC507	RP, WS	Watershed	High	TMDL Approved on 1/26/2000
4a	Washington W.A.	Water Supply	Siltation	LM010941	WS	Lake	Low	TMDL Approved on 1/26/2000

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10270207

Lower Little Blue

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Washington W.A.	Aquatic Life	Dissolved Oxygen	LM010941	WS	Lake		Small sample size

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11030009

Rattlesnake

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Quivira Big Salt Marsh	Water Supply	Chloride	LM050601	SF	Lake	Low	
5	Quivira Little Salt Marsh	Water Supply	Chloride	LM050201	SF	Lake	Low	
5	Quivira Big Salt Marsh	Water Supply	Siltation	LM050601	SF	Lake	Low	
5	Quivira Little Salt Marsh	Water Supply	Siltation	LM050201	SF	Lake	Low	
4a	Quivira Big Salt Marsh	Aquatic Life	Eutrophication	LM050601	SF	Lake	High	TMDL Approved on 9/11/2000
4a	Quivira Little Salt Marsh	Aquatic Life	Eutrophication	LM050201	SF	Lake	High	TMDL Approved on 9/11/2000
4a	Quivira Big Salt Marsh	Aquatic Life	pH	LM050601	SF	Lake	High	TMDL Approved on 9/11/2000
4a	Quivira Little Salt Marsh	Aquatic Life	pH	LM050201	SF	Lake	High	TMDL Approved on 9/11/2000
3	Kiowa Co. SFL	Aquatic Life	Eutrophication	LM042801	KW	Lake		Small sample size, No samples since 1991

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**11030010
Gar-Peace**

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Arkansas River Near Maize	Aquatic Life	Total Phosphorus	SC536	RN, SG	Watershed	Medium	median value: 0.2015 > median flag value:0.201
5	Arkansas River Near Yoder	Aquatic Life	Total Phosphorus	SC524	RN	Watershed	Medium	median value: 0.235 > median flag value:0.201
4a	Arkansas River Near Hutchinson	Aquatic Life	Biology	SC523	RC, RN	Watershed	Medium	TMDL Approved on 8/3/2007, SB283
4a	Arkansas River Near Maize	Aquatic Life	Biology	SC536	RN, SG	Watershed	Medium	TMDL Approved on 8/3/2007, SB283
4a	Arkansas River Near Yoder	Aquatic Life	Biology	SC524	RN	Watershed	Medium	TMDL Approved on 8/3/2007, SB283
4a	Arkansas River Near Hutchinson	Water Supply	Chloride	SC523	RC, RN	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Arkansas River Near Maize	Water Supply	Chloride	SC536	RN, SG	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Arkansas River Near Yoder	Water Supply	Chloride	SC524	RN	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Peace Creek Near Sterling	Water Supply	Chloride	SC658	SF, RN, PR	Watershed	Low	TMDL Approved on 7/27/2001
4a	Salt Creek Near Hutchinson	Water Supply	Chloride	SC659	RN	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Carey Park Lake	Aquatic Life	Eutrophication	LM063001	RN	Lake	Low	TMDL Approved on 11/13/2000
4a	Peace Creek Near Sterling	Recreation	Fecal Coli	SC658	SF, RN, PR	Watershed	Medium	TMDL Approved on 7/27/2001
4a	Peace Creek Near Sterling	Aquatic Life	pH	SC658	SF, RN, PR	Watershed	Medium	TMDL Approved on 7/27/2001

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11030010

Gar-Peace

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Salt Creek Near Hutchinson	Aquatic Life	pH	SC659	RN	Watershed	Medium	TMDL Approved on 7/27/2001
3	Arkansas River Near Maize	Aquatic Life	Atrazine	SC536	RN, SG	Watershed		Recent Trends indicate concern
3	Salt Creek Near Hutchinson	Recreation	E. coli	SC659	RN	Watershed		Small sample size

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11030011

Cow Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Cow Creek Near Lyons	Aquatic Life	Atrazine	SC657	EW, BT, RC	Watershed	Low	Last exceedence occurred in most current sample year:2009
5	Little Cow Creek Near Lyons	Aquatic Life	Copper	SC656	EW, RC	Watershed	Low	
5	Cow Creek Near Willowbrook	Aquatic Life	Lead	SC522	RC, RN	Watershed	Low	
5	Little Cow Creek Near Lyons	Aquatic Life	Lead	SC656	EW, RC	Watershed	Low	
5	Cow Creek Near Hutchinson	Food Procurement	PCB	SC287	RN	Watershed	Low	Fish consumption advisory
5	Cow Creek Near Hutchinson	Aquatic Life	Selenium	SC287	RN	Watershed	Low	
5	Cheyenne Bottoms	Water Supply	Siltation	LM050401	BT	Lake	Low	
5	Cow Creek Near Lyons	Aquatic Life	Total Phosphorus	SC657	EW, BT, RC	Watershed	Low	median value: 0.429 > median flag value:0.201
5	Cow Creek Near Willowbrook	Aquatic Life	Total Phosphorus	SC522	RC, RN	Watershed	Low	median value: 0.427 > median flag value:0.201
5	Little Cow Creek Near Lyons	Aquatic Life	Total Phosphorus	SC656	EW, RC	Watershed	Low	median value: 1.97 > median flag value:0.201
5	Cow Creek Near Lyons	Aquatic Life	Total Suspended Solids	SC657	EW, BT, RC	Watershed	Low	median value: 77.5 > median flag value:50
5	Cow Creek Near Willowbrook	Aquatic Life	Total Suspended Solids	SC522	RC, RN	Watershed	Low	median value: 75 > median flag value:50
4a	Little Cow Creek Near Lyons	Aquatic Life	Ammonia	SC656	EW, RC	Watershed	High	TMDL Approved on 8/3/2007

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11030011

Cow Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Cow Creek Near Hutchinson	Aquatic Life	Biology	SC287	RN	Watershed	Medium	TMDL Approved on 8/3/2007, SB283
4a	Cow Creek Near Hutchinson	Water Supply	Chloride	SC287	RN	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Cow Creek Near Lyons	Water Supply	Chloride	SC657	EW, BT, RC	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Cow Creek Near Willowbrook	Water Supply	Chloride	SC522	RC, RN	Watershed	High	TMDL Approved on 8/9/2000
4a	Little Cow Creek Near Lyons	Water Supply	Chloride	SC656	EW, RC	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Cheyenne Bottoms	Aquatic Life	Dissolved Oxygen	LM050401	BT	Lake	High	TMDL Approved on 9/11/2000
4a	Little Cow Creek Near Lyons	Aquatic Life	Dissolved Oxygen	SC656	EW, RC	Watershed	High	TMDL Approved on 9/11/2000
4a	Cheyenne Bottoms	Aquatic Life	Eutrophication	LM050401	BT	Lake	High	TMDL Approved on 9/11/2000
4a	Cow Creek Near Hutchinson	Recreation	Fecal Coli	SC287	RN	Watershed	High	TMDL Approved on 8/9/2000
4a	Cow Creek Near Lyons	Recreation	Fecal Coli	SC657	EW, BT, RC	Watershed	High	TMDL Approved on 8/9/2000
4a	Cow Creek Near Willowbrook	Recreation	Fecal Coli	SC522	RC, RN	Watershed	High	TMDL Approved on 8/9/2000
4a	Little Cow Creek Near Lyons	Recreation	Fecal Coli	SC656	EW, RC	Watershed	High	TMDL Approved on 8/9/2000
4a	Little Cow Creek Near Lyons	Water Supply	Nitrate	SC656	EW, RC	Watershed	High	TMDL Approved on 8/3/2007
3	Little Cow Creek Near Lyons	Aquatic Life	Diazinon	SC656	EW, RC	Watershed	Low	
3	Sterling City Lake	Aquatic Life	Eutrophication	LM064801	RC	Lake		Small sample size, sampled in 1994 and 2007

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11030012

Little Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Little Arkansas River At Alta Mills	Aquatic Life	Total Suspended Solids	SC246	MP, RC, RN	Watershed	High	median value: 54 > median flag value:50
5	Emma Creek Near Sedgwick	Aquatic Life	Lead	SC534	MP, MN, HV	Watershed	Medium	
5	Kisiwa Creek Near Halstead	Aquatic Life	Lead	SC703	HV, RN	Watershed	Medium	
5	Little Arkansas River At Alta Mills	Aquatic Life	Lead	SC246	MP, RC, RN	Watershed	Medium	
5	Little Arkansas River At Wichita	Aquatic Life	Lead	SC728	SG, SU	Watershed	Medium	
5	Turkey Creek Near Alta Mills	Aquatic Life	Lead	SC533	MP, RC, RN	Watershed	Medium	
5	Emma Creek Near Sedgwick	Water Supply	Arsenic	SC534	MP, MN, HV	Watershed	Low	
5	Turkey Creek Near Alta Mills	Water Supply	Arsenic	SC533	MP, RC, RN	Watershed	Low	
5	Black Kettle Creek Near Halstead	Aquatic Life	Atrazine	SC705	MP, HV	Watershed	Low	4b in waiting
5	Kisiwa Creek Near Halstead	Aquatic Life	Atrazine	SC703	HV, RN	Watershed	Low	4b in waiting
5	Little Arkansas River At Alta Mills	Aquatic Life	Atrazine	SC246	MP, RC, RN	Watershed	Low	Recent Trends Do Not Indicate Concern
5	Little Arkansas River At Valley Center	Aquatic Life	Atrazine	SC282	HV, SG	Watershed	Low	
5	Little Arkansas River At Wichita	Aquatic Life	Atrazine	SC728	SG, SU	Watershed	Low	
5	Black Kettle Creek Near Halstead	Aquatic Life	Copper	SC705	MP, HV	Watershed	Low	
5	Kisiwa Creek Near Halstead	Aquatic Life	Copper	SC703	HV, RN	Watershed	Low	
5	Little Arkansas River At Alta Mills	Aquatic Life	Copper	SC246	MP, RC, RN	Watershed	Low	
5	Black Kettle Creek Near Halstead	Aquatic Life	Dissolved Oxygen	SC705	MP, HV	Watershed	Low	
5	Emma Creek Near Sedgwick	Aquatic Life	Dissolved Oxygen	SC534	MP, MN, HV	Watershed	Low	
5	Black Kettle Creek Near Halstead	Aquatic Life	Lead	SC705	MP, HV	Watershed	Low	

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Little Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Little Arkansas River At Valley Center	Aquatic Life	Lead	SC282	HV, SG	Watershed	Low	
5	Little Arkansas River At Wichita	Food Procurement	Mercury	SC728	SG, SU	Watershed	Low	Fish consumption advisory
5	Turkey Creek Near Alta Mills	Aquatic Life	Selenium	SC533	MP, RC, RN	Watershed	Low	
5	Black Kettle Creek Near Halstead	Aquatic Life	Total Phosphorus	SC705	MP, HV	Watershed	Low	median value: 0.781 > median flag value:0.201
5	Emma Creek Near Sedgwick	Aquatic Life	Total Phosphorus	SC534	MP, MN, HV	Watershed	Low	median value: 0.735 > median flag value:0.201
5	Kisiwa Creek Near Halstead	Aquatic Life	Total Phosphorus	SC703	HV, RN	Watershed	Low	median value: 0.785 > median flag value:0.201
5	Little Arkansas River At Alta Mills	Aquatic Life	Total Phosphorus	SC246	MP, RC, RN	Watershed	Low	median value: 0.516 > median flag value:0.201
5	Little Arkansas River At Valley Center	Aquatic Life	Total Phosphorus	SC282	HV, SG	Watershed	Low	median value: 0.5405 > median flag value:0.201
5	Little Arkansas River At Wichita	Aquatic Life	Total Phosphorus	SC728	SG, SU	Watershed	Low	median value: 0.376 > median flag value:0.201
5	Sand Creek Near Sedgwick	Aquatic Life	Total Phosphorus	SC535	MN, HV	Watershed	Low	median value: 2.07 > median flag value:0.201
5	Turkey Creek Near Alta Mills	Aquatic Life	Total Phosphorus	SC533	MP, RC, RN	Watershed	Low	median value: 0.69 > median flag value:0.201

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Little Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Black Kettle Creek Near Halstead	Aquatic Life	Total Suspended Solids	SC705	MP, HV	Watershed	Low	median value: 185 > median flag value:50
5	Kisiwa Creek Near Halstead	Aquatic Life	Total Suspended Solids	SC703	HV, RN	Watershed	Low	median value: 57 > median flag value:50
5	Little Arkansas River At Valley Center	Aquatic Life	Total Suspended Solids	SC282	HV, SG	Watershed	Low	median value: 54.5 > median flag value:50
5	Little Arkansas River At Wichita	Aquatic Life	Total Suspended Solids	SC728	SG, SU	Watershed	Low	median value: 59 > median flag value:50
5	Turkey Creek Near Alta Mills	Aquatic Life	Total Suspended Solids	SC533	MP, RC, RN	Watershed	Low	median value: 84 > median flag value:50
5	Turkey Creek Near Alta Mills	Aquatic Life	Zinc	SC533	MP, RC, RN	Watershed	Low	
4b	Emma Creek Near Sedgwick	Aquatic Life	Atrazine	SC534	MP, MN, HV	Watershed	Low	4b plan Approved on 12/18/2008
4b	Sand Creek Near Sedgwick	Aquatic Life	Atrazine	SC535	MN, HV	Watershed	Low	4b plan Approved on 12/18/2008
4b	Turkey Creek Near Alta Mills	Aquatic Life	Atrazine	SC533	MP, RC, RN	Watershed	Low	4b plan Approved on 12/18/2008
4a	Black Kettle Creek Near Halstead	Aquatic Life	Biology	SC705	MP, HV	Watershed	High	TMDL Approved on 9/11/2000, SB282
4a	Emma Creek Near Sedgwick	Aquatic Life	Biology	SC534	MP, MN, HV	Watershed	High	TMDL Approved on 9/11/2000, SB282
4a	Kisiwa Creek Near Halstead	Aquatic Life	Biology	SC703	HV, RN	Watershed	High	TMDL Approved on 9/11/2000, SB282
4a	Little Arkansas River At Alta Mills	Aquatic Life	Biology	SC246	MP, RC, RN	Watershed	High	TMDL Approved on 9/11/2000

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Little Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Little Arkansas River At Valley Center	Aquatic Life	Biology	SC282	HV, SG	Watershed	High	TMDL Approved on 9/11/2000
4a	Little Arkansas River At Wichita	Aquatic Life	Biology	SC728	SG, SU	Watershed	High	TMDL Approved on 9/11/2000, SB282
4a	Sand Creek Near Sedgwick	Aquatic Life	Biology	SC535	MN, HV	Watershed	High	TMDL Approved on 9/11/2000, SB282
4a	Turkey Creek Near Alta Mills	Aquatic Life	Biology	SC533	MP, RC, RN	Watershed	High	TMDL Approved on 9/11/2000, SB282
4a	Black Kettle Creek Near Halstead	Aquatic Life	Biology/Sediment	SC705	MP, HV	Watershed	High	TMDL Approved on 9/11/2000
4a	Emma Creek Near Sedgwick	Aquatic Life	Biology/Sediment	SC534	MP, MN, HV	Watershed	High	TMDL Approved on 9/11/2000
4a	Kisiwa Creek Near Halstead	Aquatic Life	Biology/Sediment	SC703	HV, RN	Watershed	High	TMDL Approved on 9/11/2000
4a	Little Arkansas River At Alta Mills	Aquatic Life	Biology/Sediment	SC246	MP, RC, RN	Watershed	High	TMDL Approved on 9/11/2000
4a	Little Arkansas River At Valley Center	Aquatic Life	Biology/Sediment	SC282	HV, SG	Watershed	High	TMDL Approved on 9/11/2000
4a	Little Arkansas River At Wichita	Aquatic Life	Biology/Sediment	SC728	SG, SU	Watershed	High	TMDL Approved on 9/11/2000
4a	Sand Creek Near Sedgwick	Aquatic Life	Biology/Sediment	SC535	MN, HV	Watershed	High	TMDL Approved on 9/11/2000
4a	Turkey Creek Near Alta Mills	Aquatic Life	Biology/Sediment	SC533	MP, RC, RN	Watershed	High	TMDL Approved on 9/11/2000
4a	Little Arkansas River At Alta Mills	Water Supply	Chloride	SC246	MP, RC, RN	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Turkey Creek Near Alta Mills	Water Supply	Chloride	SC533	MP, RC, RN	Watershed	Medium	TMDL Approved on 9/20/2006

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Little Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Mingenback Lake	Aquatic Life	Dissolved Oxygen	LM064701	MP	Lake	Medium	TMDL Approved on 11/13/2000
4a	Sand Creek Near Sedgwick	Aquatic Life	Dissolved Oxygen	SC535	MN, HV	Watershed	Medium	TMDL Approved on 8/3/2007
4a	Turkey Creek Near Alta Mills	Aquatic Life	Dissolved Oxygen	SC533	MP, RC, RN	Watershed	High	TMDL Approved on 9/11/2000
4a	Dillon Park Lakes	Aquatic Life	Eutrophication	LM063101	RN	Lake	Medium	TMDL Approved on 11/13/2000
4a	Harvey Co. Camp Hawk Lake	Aquatic Life	Eutrophication	LM063401	HV	Lake	Low	TMDL Approved on 11/13/2000
4a	Harvey Co. West Park Lake	Aquatic Life	Eutrophication	LM049001	HV	Lake	Low	TMDL Approved on 11/13/2000
4a	Mingenback Lake	Aquatic Life	Eutrophication	LM064701	MP	Lake	Medium	TMDL Approved on 11/13/2000
4a	Newton City Park Lake	Aquatic Life	Eutrophication	LM064201	HV	Lake	High	TMDL Approved on 9/11/2000
4a	Emma Creek Near Sedgwick	Recreation	Fecal Coli	SC534	MP, MN, HV	Watershed	High	TMDL Approved on 8/9/2000
4a	Little Arkansas River At Alta Mills	Recreation	Fecal Coli	SC246	MP, RC, RN	Watershed	High	TMDL Approved on 8/9/2000
4a	Little Arkansas River At Valley Center	Recreation	Fecal Coli	SC282	HV, SG	Watershed	High	TMDL Approved on 8/9/2000
4a	Little Arkansas River At Wichita	Recreation	Fecal Coli	SC728	SG, SU	Watershed	High	TMDL Approved on 8/9/2000
4a	Sand Creek Near Sedgwick	Recreation	Fecal Coli	SC535	MN, HV	Watershed	High	TMDL Approved on 8/9/2000
4a	Turkey Creek Near Alta Mills	Recreation	Fecal Coli	SC533	MP, RC, RN	Watershed	High	TMDL Approved on 8/9/2000
4a	Sand Creek Near Sedgwick	Water Supply	Nitrate	SC535	MN, HV	Watershed	High	TMDL Approved on 8/3/2007

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Little Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Dillon Park Lakes	Aquatic Life	pH	LM063101	RN	Lake	Medium	TMDL Approved on 11/13/2000
4a	Harvey Co. Camp Hawk Lake	Water Supply	Siltation	LM063401	HV	Lake	Low	TMDL Approved on 11/13/2000
3	Inman Lake	Aquatic Life	Copper	LM050301	MP	Lake		New, Small sample size, only sampled in 2005 but violation
3	Harvey Co. West Park Lake	Aquatic Life	Dissolved Oxygen	LM049001	HV	Lake		2008 DO levels acceptable, last two sampling years DO has been good. Last violation was in 2000.
3	Inman Lake	Aquatic Life	Eutrophication	LM050301	MP	Lake		Small sample size, only sampled in 2005
3	Inman Lake	Aquatic Life	Lead	LM050301	MP	Lake		New, Small sample size, only sampled in 2005 but violation
3	Inman Lake	Water Supply	Siltation	LM050301	MP	Lake		Small sample size, only sampled in 2005
3	Mingenback Lake	Water Supply	Siltation	LM064701	MP	Lake		Small sample size, sampled in 1994 and 2006

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Middle Arkansas-Slate

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Slate Creek Near Wellington	Recreation	E. coli	SC528	SU	Watershed	High	2009 Sampling confirms impairment
5	Arkansas River At Derby	Aquatic Life	Total Phosphorus	SC281	SG	Watershed	Medium	median value: 0.639 > median flag value:0.201
5	Arkansas River At Oxford	Aquatic Life	Total Phosphorus	SC527	SG, SU, CL	Watershed	Medium	median value: 0.44 > median flag value:0.201
5	Arkansas River At Wichita	Aquatic Life	Total Phosphorus	SC729	SG, SU	Watershed	Medium	median value: 0.239 > median flag value:0.201
5	Arkansas River Near Arkansas City	Aquatic Life	Total Phosphorus	SC218	SU, CL	Watershed	Medium	median value: 0.429 > median flag value:0.201
5	Arkansas River At Wichita	Aquatic Life	Atrazine	SC729	SG, SU	Watershed	Low	
5	Cowskin Creek Near Belle Plaine	Aquatic Life	Copper	SC702	SG, SU	Watershed	Low	
5	Chisholm Creek Park Lake	Aquatic Life	Eutrophication	LM064601	SG	Lake		Small sample size, but sampled in 2008 and high nutrients and chla >20ppb with degrading trend
5	Arkansas River At Derby	Aquatic Life	Lead	SC281	SG	Watershed	Low	
5	Arkansas River At Wichita	Aquatic Life	Lead	SC729	SG, SU	Watershed	Low	
5	Arkansas River Near Arkansas City	Aquatic Life	Lead	SC218	SU, CL	Watershed	Low	
5	Cowskin Creek At Wichita	Aquatic Life	Lead	SC730	SG, SU	Watershed	Low	
5	Cowskin Creek Near Belle Plaine	Aquatic Life	Lead	SC702	SG, SU	Watershed	Low	

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Middle Arkansas-Slate

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Arkansas River At Derby	Food Procurement	PCB	SC281	SG	Watershed	Low	Fish consumption advisory
5	Arkansas River At Oxford	Aquatic Life	pH	SC527	SG, SU, CL	Watershed	Low	
5	Arkansas River Near Arkansas City	Aquatic Life	pH	SC218	SU, CL	Watershed	Low	
5	Cowskin Creek At Wichita	Aquatic Life	Total Phosphorus	SC730	SG, SU	Watershed	Low	median value: 0.374 > median flag value:0.201
5	Cowskin Creek Near Belle Plaine	Aquatic Life	Total Phosphorus	SC702	SG, SU	Watershed	Low	median value: 0.47 > median flag value:0.201
5	Slate Creek Near Wellington	Aquatic Life	Total Phosphorus	SC528	SU	Watershed	Low	median value: 0.456 > median flag value:0.201
5	Arkansas River At Derby	Aquatic Life	Total Suspended Solids	SC281	SG	Watershed	Low	
5	Arkansas River At Oxford	Aquatic Life	Total Suspended Solids	SC527	SG, SU, CL	Watershed	Low	median value: 71 > median flag value:50
5	Arkansas River Near Arkansas City	Aquatic Life	Total Suspended Solids	SC218	SU, CL	Watershed	Low	median value: 79 > median flag value:50
5	Cowskin Creek Near Belle Plaine	Aquatic Life	Total Suspended Solids	SC702	SG, SU	Watershed	Low	median value: 64 > median flag value:50
5	Slate Creek Near Wellington	Aquatic Life	Total Suspended Solids	SC528	SU	Watershed	Low	median value: 62 > median flag value:50
4a	Arkansas River At Derby	Aquatic Life	Biology	SC281	SG	Watershed	Medium	TMDL Approved on 7/27/2001
4a	Arkansas River At Wichita	Aquatic Life	Biology	SC729	SG, SU	Watershed	Low	TMDL Approved on 7/27/2001, SB281

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Middle Arkansas-Slate

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Arkansas River Near Arkansas City	Aquatic Life	Biology	SC218	SU, CL	Watershed	Medium	TMDL Approved on 7/27/2001
4a	Cowskin Creek At Wichita	Aquatic Life	Biology	SC730	SG, SU	Watershed	High	TMDL Approved on 9/28/2007, SB346
4a	Cowskin Creek In Wichita-Valley Center Floodway	Aquatic Life	Biology	SC288	SG	Watershed	High	TMDL Approved on 9/28/2007, SB346
4a	Arkansas River At Derby	Water Supply	Chloride	SC281	SG	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Arkansas River At Oxford	Water Supply	Chloride	SC527	SG, SU, CL	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Arkansas River At Wichita	Water Supply	Chloride	SC729	SG, SU	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Arkansas River Near Arkansas City	Water Supply	Chloride	SC218	SU, CL	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Slate Creek Near Wellington	Water Supply	Chloride	SC528	SU	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Slate Creek W.A.	Water Supply	Chloride	LM014201	SU	Lake	Medium	TMDL Approved on 11/13/2000
4a	Cadillac Lake (Pracht Wetland)	Aquatic Life	Eutrophication	LM054101	SG	Lake	Low	TMDL Approved on 11/13/2000
4a	Horseshoe Lake	Aquatic Life	Eutrophication	LM063501	SG	Lake	Low	TMDL Approved on 11/13/2000
4a	Kid's Lake	Aquatic Life	Eutrophication	LM063601	SG	Lake	Low	TMDL Approved on 11/13/2000
4a	Slate Creek W.A.	Aquatic Life	Eutrophication	LM014201	SU	Lake	Medium	TMDL Approved on 11/13/2000
4a	Watson Park Lake	Aquatic Life	Eutrophication	LM064401	SG	Lake	Low	TMDL Approved on 11/13/2000
4a	Arkansas River At Derby	Recreation	Fecal Coli	SC281	SG	Watershed	High	TMDL Approved on 8/9/2000

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Middle Arkansas-Slate

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Arkansas River At Oxford	Recreation	Fecal Coli	SC527	SG, SU, CL	Watershed	High	TMDL Approved on 8/9/2000
4a	Arkansas River At Wichita	Recreation	Fecal Coli	SC729	SG, SU	Watershed	High	TMDL Approved on 8/9/2000
4a	Cowskin Creek At Wichita	Recreation	Fecal Coli	SC730	SG, SU	Watershed	High	TMDL Approved on 8/9/2000
4a	Cowskin Creek In Wichita-Valley Center Floodway	Recreation	Fecal Coli	SC288	SG	Watershed	High	TMDL Approved on 8/9/2000
4a	Cowskin Creek In Wichita-Valley Center Floodway	Aquatic Life	pH	SC288	SG	Watershed	High	TMDL Approved on 9/28/2007
4a	Slate Creek W.A.	Aquatic Life	pH	LM014201	SU	Lake	Medium	TMDL Approved on 11/13/2000
4a	Slate Creek W.A.	Water Supply	Siltation	LM014201	SU	Lake	Medium	TMDL Approved on 11/13/2000
4a	Slate Creek Near Wellington	Water Supply	Sulfate	SC528	SU	Watershed	Low	TMDL Approved on 7/27/2001
4a	Slate Creek W.A.	Water Supply	Sulfate	LM014201	SU	Lake	Low	TMDL Approved on 11/13/2000
3	Arkansas River At Derby	Aquatic Life	Atrazine	SC281	SG	Watershed		Recent Trends indicate concern
3	Vic's Lake	Aquatic Life	Eutrophication	LM064301	SG	Lake		Last sample in 2006 and Chla is <10 ppb and status is improving; only other sample was from 1989
3	Windmill Lake	Aquatic Life	Eutrophication	LM064501	SG	Lake		Small sample size, last sampled in 2006 and
3	Arkansas River At Oxford	Aquatic Life	Lead	SC527	SG, SU, CL	Watershed		

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Middle Arkansas-Slate

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Slate Creek Near Wellington	Aquatic Life	Lead	SC528	SU	Watershed		

11030014

North Fork Ninnescah

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Red Rock Creek	Aquatic Life	Atrazine	USGS071447	RN	Watershed	Low	
4a	Cheney Lake	Aquatic Life	Eutrophication	LM017001	RN	Lake	High	TMDL Approved on 9/11/2000
4a	North Fork Ninnescah River Near Castleton	Aquatic Life	pH	SC525	SF, RN, PR	Watershed	Low	TMDL Approved on 7/27/2001
4a	Cheney Lake	Water Supply	Siltation	LM017001	RN	Lake	High	TMDL Approved on 8/9/2000

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South Fork Ninescah

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Texas Lake W.A.	Aquatic Life	Dissolved Oxygen	LM053001	PR	Lake	Low	
5	Pratt Co. Lake	Aquatic Life	pH	LM064001	PR	Lake	Low	
4a	Kingman Co. SFL	Recreation	Aquatic Plants	LM010401	KM	Lake	Medium	TMDL Approved on 11/13/2000
4a	South Fork Ninescah River Near Murdock	Water Supply	Chloride	SC036	PR, KM	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Kingman Co. SFL	Aquatic Life	Dissolved Oxygen	LM010401	KM	Lake	Medium	TMDL Approved on 11/13/2000
4a	Pratt Co. Lake	Aquatic Life	Eutrophication	LM064001	PR	Lake	High	TMDL Approved on 9/11/2000
4a	Kingman Co. SFL	Aquatic Life	pH	LM010401	KM	Lake	Medium	TMDL Approved on 11/13/2000
3	Ninescah River, South Fork	Aquatic Life	Ammonia	NPDES49751	PR	Facility		Evaluate for 2012 303(d) list
3	Lemon Park Lake	Aquatic Life	Eutrophication	LM063901	PR	Lake		Last sample in 2006 and Chla is <5 ppb and status is improving; only other sample was from 1989

11030016

Ninescah

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Ninescah River Near Belle Plaine	Aquatic Life	Total Suspended Solids	SC280	SG, KM, SU	Watershed	Low	median value: 60 > median flag value:50
4a	Ninescah River Near Belle Plaine	Water Supply	Chloride	SC280	SG, KM, SU	Watershed	Medium	TMDL Approved on 9/20/2006
4a	Lake Afton	Aquatic Life	Eutrophication	LM049201	SG	Lake	High	TMDL Approved on 9/11/2000

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11060001

Kaw Lake

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Cowley Co. SFL	Aquatic Life	Eutrophication	LM013401	CL	Lake	Low	
4a	Silver Creek Near Silverdale	Aquatic Life	Dissolved Oxygen	SC706	CL	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Cowley Co. SFL	Aquatic Life	Selenium	LM013401	CL	Lake	Low	TMDL Approved on 11/13/2000

11060002

Upper Salt Fork Arkansas

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Mule Creek Near Aetna	Aquatic Life	Temperature	SC622	KW, BA, CM	Watershed	Low	
5	Salt Fork Arkansas River Near Hardtner	Aquatic Life	Temperature	SC591	BA, CM	Watershed	Low	
4a	Mule Creek Near Aetna	Recreation	Fecal Coli	SC622	KW, BA, CM	Watershed	Medium	TMDL Approved on 7/27/2001

11060003

Medicine Lodge

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Barber Co. SFL	Water Supply	Sulfate	LM013101	BA	Lake	Low	
5	Medicine Lodge River Near Kiowa	Aquatic Life	Temperature	SC220	BA	Watershed	Low	
4a	Barber Co. SFL	Aquatic Life	Dissolved Oxygen	LM013101	BA	Lake	Low	TMDL Approved on 11/13/2000
4a	Medicine Lodge River Near Belvidere	Recreation	Fecal Coli	SC588	KW	Watershed	High	TMDL Approved on 8/9/2000
4a	Medicine Lodge River Near Medicine Lodge	Recreation	Fecal Coli	SC589	PR, KW, BA	Watershed	High	TMDL Approved on 8/9/2000
4a	Medicine Lodge River Near Belvidere	Water Supply	Sulfate	SC588	KW	Watershed	Low	TMDL Approved on 9/20/2006
4a	Medicine Lodge River Near Medicine Lodge	Water Supply	Sulfate	SC589	PR, KW, BA	Watershed	Low	TMDL Approved on 9/20/2006

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11060005

Chikaskia

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Chikaskia River Near Corbin	Recreation	E. coli	SC529	SU	Watershed	Medium	2009 Sampling confirms impairment
5	Chikaskia River Near Corbin	Aquatic Life	Copper	SC529	SU	Watershed	Low	
5	Isabel W.A.	Aquatic Life	Copper	LM014301	PR	Lake	Low	
5	Isabel W.A.	Aquatic Life	Dissolved Oxygen	LM014301	PR	Lake	Low	
5	Chikaskia River Near Corbin	Aquatic Life	Lead	SC529	SU	Watershed	Low	
5	Bluff Creek Near Bluff City	Aquatic Life	Total Phosphorus	SC618	HP	Watershed	Low	median value: 0.2065 > median flag value:0.201
5	Shoofly Creek Near Hunnewell	Aquatic Life	Total Phosphorus	SC663	SU	Watershed	Low	median value: 0.209 > median flag value:0.201
4a	Anthony City Lake	Aquatic Life	Dissolved Oxygen	LM048801	HP	Lake	High	TMDL Approved on 8/3/2007
4a	Anthony City Lake	Aquatic Life	Eutrophication	LM048801	HP	Lake	High	TMDL Approved on 8/3/2007
4a	Isabel W.A.	Aquatic Life	Eutrophication	LM014301	PR	Lake	Low	TMDL Approved on 11/13/2000
4a	Bluff Creek Near Bluff City	Recreation	Fecal Coli	SC618	HP	Watershed	High	TMDL Approved on 8/9/2000
4a	Bluff Creek Near Caldwell	Recreation	Fecal Coli	SC530	HP	Watershed	High	TMDL Approved on 8/9/2000
4a	Fall Creek Near Caldwell	Recreation	Fecal Coli	SC662	SU	Watershed	High	TMDL Approved on 8/9/2000
4a	Anthony City Lake	Aquatic Life	pH	LM048801	HP	Lake	High	TMDL Approved on 8/3/2007
4a	Isabel W.A.	Aquatic Life	pH	LM014301	PR	Lake	Low	TMDL Approved on 11/13/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Lower Arkansas Basin

**11060005
Chikaskia**

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Wellington Lake	Aquatic Life	Selenium	LM042201	SU	Lake	Low	TMDL Approved on 11/13/2000
4a	Anthony City Lake	Water Supply	Siltation	LM048801	HP	Lake	High	TMDL Approved on 8/3/2007
4a	Wellington Lake	Water Supply	Siltation	LM042201	SU	Lake	Medium	TMDL Approved on 11/13/2000
3	Sandy Creek	Aquatic Life	Ammonia	NPDES30643	KM	Facility		NPDES Permit-Lagoon Study Pending
3	Sandy Creek	Aquatic Life	Dissolved Oxygen	NPDES30643	KM	Facility		NPDES Permit-Lagoon Study Pending
3	Sandy Creek	Recreation	Fecal Coli	NPDES30643	KM	Facility		NPDES Permit-Lagoon Study Pending
3	Bluff Creek Near Caldwell	Aquatic Life	Lead	SC530	HP	Watershed		

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290101

Upper Marais Des Cygnes

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Salt Creek	Aquatic Life	Ammonia	NPDES24821	OS	Facility	High	Inadequate Wastewater Treatment
5	Salt Creek	Recreation	E. coli	NPDES24821	OS	Facility	High	Inadequate Wastewater Treatment
5	Marais Des Cygnes River Near Quenemo	Aquatic Life	Total Suspended Solids	SC720	OS, CF	Watershed	High	median value: 52 > median flag value:50
5	Cedar Creek Lake	Aquatic Life	Eutrophication	LM040701	AN	Lake	Medium	
5	Cedar Creek Lake	Water Supply	Siltation	LM040701	AN	Lake	Medium	
5	110 Mile Creek Near Scranton	Aquatic Life	Atrazine	SC633	OS, FR	Watershed	Low	Recent Trends Do Not Indicate Concern
5	One Hundred Forty Two Mile Creek Near Reading	Aquatic Life	Atrazine	SC579	LY	Watershed	Low	Recent Trends Do Not Indicate Concern
5	Salt Creek Near Lyndon	Aquatic Life	Atrazine	SC578	OS, FR	Watershed	Low	
5	Switzler Creek Near Burlingame	Aquatic Life	Atrazine	SC687	OS	Watershed	Low	
5	Marais Des Cygnes River Near Ottawa	Aquatic Life	Biology	SC270	DG, FR	Watershed	Low	
5	Ottawa Creek Near Ottawa	Aquatic Life	Copper	SC616	DG, FR	Watershed	Low	
5	Appanoose Creek Near Richter	Aquatic Life	Dissolved Oxygen	SC692	DG, OS, FR	Watershed	Low	
5	Richmond City Lake	Aquatic Life	Dissolved Oxygen	LM046801	FR	Lake	Low	
5	Salt Creek Near Lyndon	Aquatic Life	Dissolved Oxygen	SC578	OS, FR	Watershed	Low	
5	Ottawa Creek Near Ottawa	Aquatic Life	Lead	SC616	DG, FR	Watershed	Low	
5	Westphalia Lake	Water Supply	Siltation	LM066901	AN	Lake	Low	
4c	Pottawatomie Creek Near Osawatomie	Aquatic Life	Biology	SC556	FR, AN	Watershed		Hydrology impaired, SB368

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290101

Upper Marais Des Cygnes

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Spring Creek Park Lake	Recreation	Aquatic Plants	LM066801	DG	Lake	Low	TMDL Approved on 8/28/2001
4a	110 Mile Creek Near Scranton	Aquatic Life	Dissolved Oxygen	SC633	OS, FR	Watershed	High	TMDL Approved on 8/28/2001
4a	Dragoon Creek Near Burlingame	Aquatic Life	Dissolved Oxygen	SC577	WB, OS	Watershed	High	TMDL Approved on 8/28/2001
4a	Marais Des Cygnes River Near Reading	Aquatic Life	Dissolved Oxygen	SC742	WB, LY	Watershed	High	TMDL Approved on 8/28/2001
4a	One Hundred Forty Two Mile Creek Near Reading	Aquatic Life	Dissolved Oxygen	SC579	LY	Watershed	High	TMDL Approved on 8/28/2001
4a	Ottawa Creek Near Ottawa	Aquatic Life	Dissolved Oxygen	SC616	DG, FR	Watershed	High	TMDL Approved on 8/28/2001
4a	Pottawatomie Creek Near Osawatomie	Aquatic Life	Dissolved Oxygen	SC556	FR, AN	Watershed	High	TMDL Approved on 8/28/2001
4a	Switzler Creek Near Burlingame	Aquatic Life	Dissolved Oxygen	SC687	OS	Watershed	High	TMDL Approved on 8/28/2001
4a	Crystal Lake	Aquatic Life	Eutrophication	LM064901	AN	Lake	Medium	TMDL Approved on 8/28/2001
4a	Lebo City Park Lake	Aquatic Life	Eutrophication	LM065601	CF	Lake	Low	TMDL Approved on 8/28/2001
4a	Osage City Reservoir	Aquatic Life	Eutrophication	LM066101	OS	Lake	Low	TMDL Approved on 8/28/2001
4a	Pomona Lake	Aquatic Life	Eutrophication	LM028001	OS	Lake	High	TMDL Approved on 8/28/2001
4a	Spring Creek Park Lake	Aquatic Life	Eutrophication	LM066801	DG	Lake	Low	TMDL Approved on 8/28/2001
4a	Marais Des Cygnes River Near Ottawa	Recreation	Fecal Coli	SC270	DG, FR	Watershed	High	TMDL Approved on 8/28/2001
4a	Marais Des Cygnes River Near Reading	Recreation	Fecal Coli	SC742	WB, LY	Watershed	High	TMDL Approved on 8/28/2001

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290101

Upper Marais Des Cygnes

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	One Hundred Forty Two Mile Creek Near Reading	Recreation	Fecal Coli	SC579	LY	Watershed	High	TMDL Approved on 8/28/2001
4a	Pomona Lake	Water Supply	Siltation	LM028001	OS	Lake	High	TMDL Approved on 8/28/2001
3	Lebo City Lake	Aquatic Life	Copper	LM041201	CF	Lake		No samples since 1993
3	Garnett North Lake	Aquatic Life	Eutrophication	LM040601	AN	Lake		Only 1 sample since 1993
3	Appanoose Creek Near Richter	Aquatic Life	Lead	SC692	DG, OS, FR	Watershed		

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290102

Lower Marais Des Cygnes

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Marais Des Cygnes Near Trading Post	Aquatic Life	Total Suspended Solids	SC745	LN	Watershed	High	median value: 66 > median flag value:50
5	Pleasanton Reservoir	Aquatic Life	Eutrophication	LM044201	LN	Lake	Medium	
5	Spring Hill City Lake	Aquatic Life	Eutrophication	LM073501	JO	Lake	Medium	
5	Marais Des Cygnes W.A.	Water Supply	Arsenic	LM053201	LN	Lake	Low	
5	Marais Des Cygnes Near Trading Post	Aquatic Life	Copper	SC206	MI, LN	Watershed	Low	Bridge work and surrogate station had hits (SC745)
5	Marais Des Cygnes W.A.	Aquatic Life	Copper	LM053201	LN	Lake	Low	
5	Marais Des Cygnes W.A.	Aquatic Life	Lead	LM053201	LN	Lake	Low	
5	Middle Creek Near New Lancaster	Aquatic Life	Zinc	SC697	MI	Watershed	Low	
4a	Mound City Lake	Recreation	Aquatic Plants	LM051401	LN	Lake	Medium	TMDL Approved on 8/28/2001
4a	Edgerton City Lake	Aquatic Life	Atrazine	LM065001	JO	Lake	Medium	TMDL Approved on 8/28/2001
4a	Big Sugar Creek Near Trading Post	Aquatic Life	Dissolved Oxygen	SC558	AN, LN	Watershed	Medium	TMDL Approved on 2/28/2008
4a	Marais Des Cygnes W.A.	Aquatic Life	Dissolved Oxygen	LM053201	LN	Lake	High	TMDL Approved on 8/28/2001
4a	Middle Creek Near New Lancaster	Aquatic Life	Dissolved Oxygen	SC697	MI	Watershed	High	TMDL Approved on 8/28/2001
4a	Mound City Lake	Aquatic Life	Dissolved Oxygen	LM051401	LN	Lake	Medium	TMDL Approved on 8/28/2001
4a	Edgerton City Lake	Aquatic Life	Eutrophication	LM065001	JO	Lake	Medium	TMDL Approved on 8/28/2001
4a	Hillsdale Lake	Aquatic Life	Eutrophication	LM035001	JO, MI	Lake	High	TMDL Approved on 8/28/2001

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290102

Lower Marais Des Cygnes

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Louisburg SFL	Aquatic Life	Eutrophication	LM043801	MI	Lake	High	TMDL Approved on 2/28/2008
4a	Marais Des Cygnes W.A.	Aquatic Life	Eutrophication	LM053201	LN	Lake	High	TMDL Approved on 8/28/2001
4a	Miami Co. SFL	Aquatic Life	Eutrophication	LM043601	MI	Lake	Medium	TMDL Approved on 8/28/2001
4a	Mound City Lake	Aquatic Life	Eutrophication	LM051401	LN	Lake	Medium	TMDL Approved on 8/28/2001
4a	Marais Des Cygnes W.A.	Aquatic Life	pH	LM053201	LN	Lake	High	TMDL Approved on 8/28/2001
4a	Miami Co. SFL	Aquatic Life	pH	LM043601	MI	Lake	Medium	TMDL Approved on 8/28/2001
4a	Mound City Lake	Aquatic Life	pH	LM051401	LN	Lake	Medium	TMDL Approved on 8/28/2001
4a	Marais Des Cygnes W.A.	Water Supply	Siltation	LM053201	LN	Lake	High	TMDL Approved on 8/28/2001
3	Bull Creek Near Henson	Recreation	E. coli	SC557	MI	Watershed		Small sample size
3	La Cygne Lake	Aquatic Life	Eutrophication	LM044002	MI, LN	Lake		No samples since 1992
3	Louisburg Old Lake	Aquatic Life	Eutrophication	LM065701	MI	Lake		Only 1 sample since 1995
3	Paola City Lake	Aquatic Life	Eutrophication	LM073201	MI	Lake		Only sample in 1994
3	Parker City Lake	Aquatic Life	Eutrophication	LM066301	LN	Lake		Only 1 sample since 1995
3	Pleasanton Lake #1	Aquatic Life	Eutrophication	LM066401	LN	Lake		Only 1 sample since 1995
3	Pleasanton Lake #2	Aquatic Life	Eutrophication	LM066501	LN	Lake		Only 1 sample since 1995
3	Marais Des Cygnes River Near Henson	Aquatic Life	Lead	SC743	FR, MI	Watershed		

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290103

Little Osage

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Little Osage River Near Fulton	Aquatic Life	Biology	SC207	AN, LN, AL, BB	Watershed	High	SB364
5	Little Osage River Near Fulton	Aquatic Life	Dissolved Oxygen	SC207	AN, LN, AL, BB	Watershed	High	
4a	Prescott City Lake	Aquatic Life	Eutrophication	LM066601	LN	Lake	Low	TMDL Approved on 8/28/2001
4a	Little Osage River Near Fulton	Recreation	Fecal Coli	SC207	AN, LN, AL, BB	Watershed	Medium	TMDL Approved on 8/28/2001

2010 303(d) List of All Impaired/Potentially Impaired Waters Marais des Cygnes Basin

10290104

Marmaton

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Rock Creek Lake	Aquatic Life	Dissolved Oxygen	LM045201	BB	Lake	Low	
4a	Marmaton River Near Fort Scott	Aquatic Life	Biology	SC208	BB	Watershed	High	TMDL Approved on 8/28/2001, SB325
4a	Bourbon Co. SFL	Aquatic Life	Dissolved Oxygen	LM013301	BB	Lake	Medium	TMDL Approved on 2/28/2008
4a	Drywood Creek Near Garland	Aquatic Life	Dissolved Oxygen	SC617	BB, CR	Watershed	Low	TMDL Approved on 2/28/2008
4a	Marmaton River Near Fort Scott	Aquatic Life	Dissolved Oxygen	SC208	BB	Watershed	High	TMDL Approved on 8/28/2001
4a	Marmaton River Near Fort Scott	Aquatic Life	Dissolved Oxygen	SC559	AL, BB	Watershed	High	TMDL Approved on 8/28/2001
4a	Bourbon Co. SFL	Aquatic Life	Eutrophication	LM013301	BB	Lake	Medium	TMDL Approved on 2/28/2008
4a	Bronson City Lake	Aquatic Life	Eutrophication	LM046201	BB	Lake	Medium	TMDL Approved on 8/28/2001
4a	Elm Creek Lake	Aquatic Life	Eutrophication	LM044801	BB	Lake	Low	TMDL Approved on 8/28/2001
4a	Lake Crawford State Park #2	Aquatic Life	Eutrophication	LM011101	CR	Lake	High	TMDL Approved on 2/28/2008
4a	Rock Creek Lake	Aquatic Life	Eutrophication	LM045201	BB	Lake	High	TMDL Approved on 2/28/2008
4a	Bourbon Co. SFL	Aquatic Life	pH	LM013301	BB	Lake	Medium	TMDL Approved on 2/28/2008
3	Marmaton River Near Fort Scott	Aquatic Life	Biology	SC559	AL, BB	Watershed		Small sample size
3	Gunn Park East Lake	Aquatic Life	Eutrophication	LM065401	BB	Lake		Only 1 sample since 1990
3	Gunn Park West Lake	Aquatic Life	Eutrophication	LM065501	BB	Lake		Only 1 sample since 1990

2010 303(d) List of All Impaired/Potentially Impaired Waters Missouri Basin

10240005

Tarkio-Wolf

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Wolf River Near Sparks	Aquatic Life	Atrazine	SC201	BR, DP	Watershed	Low	
4a	Brown Co. SFL	Recreation	Aquatic Plants	LM010301	BR	Lake	Medium	TMDL Approved on 8/28/2001
4a	Troy Fair Lake	Recreation	Aquatic Plants	LM073801	DP	Lake	Low	TMDL Approved on 8/28/2001
4a	Hiawatha City Lake	Aquatic Life	Atrazine	LM011601	BR	Lake	Medium	TMDL Approved on 8/28/2001
4a	Wolf River Near Sparks	Aquatic Life	Biology	SC201	BR, DP	Watershed	High	TMDL Approved on 2/28/2008, SB363
4a	Brown Co. SFL	Aquatic Life	Dissolved Oxygen	LM010301	BR	Lake	Medium	TMDL Approved on 8/28/2001
4a	Brown Co. SFL	Aquatic Life	Eutrophication	LM010301	BR	Lake	Medium	TMDL Approved on 8/28/2001
4a	Hiawatha City Lake	Aquatic Life	Eutrophication	LM011601	BR	Lake	Medium	TMDL Approved on 8/28/2001
4a	Troy Fair Lake	Aquatic Life	Eutrophication	LM073801	DP	Lake	Low	TMDL Approved on 8/28/2001
4a	Wolf River Near Sparks	Recreation	Fecal Coli	SC201	BR, DP	Watershed	High	TMDL Approved on 8/28/2001
4a	Brown Co. SFL	Aquatic Life	pH	LM010301	BR	Lake	Medium	TMDL Approved on 8/28/2001

2010 303(d) List of All Impaired/Potentially Impaired Waters Missouri Basin

10240007

South Fork Big Nemaha

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	South Fork Nemaha River Near Bern	Aquatic Life	Total Phosphorus	SC234	NM, JA	Watershed	Medium	median value: 0.232 > median flag value:0.201
5	Sabetha City Lake	Aquatic Life	Atrazine	LM011501	NM	Lake	Low	
5	South Fork Nemaha River Near Bern	Aquatic Life	Atrazine	SC234	NM, JA	Watershed	Low	
5	Turkey Creek Near Bern	Aquatic Life	Copper	SC601	MS, NM	Watershed	Low	
4a	Turkey Creek Near Bern	Aquatic Life	Atrazine	SC601	MS, NM	Watershed	Medium	TMDL Approved on 2/28/2008
4a	South Fork Nemaha River Near Bern	Aquatic Life	Biology	SC234	NM, JA	Watershed	High	TMDL Approved on 2/28/2008
4a	Sabetha City Lake	Aquatic Life	Eutrophication	LM011501	NM	Lake	Low	TMDL Approved on 8/28/2001
4a	South Fork Nemaha River Near Bern	Recreation	Fecal Coli	SC234	NM, JA	Watershed	High	TMDL Approved on 8/28/2001
4a	Turkey Creek Near Bern	Recreation	Fecal Coli	SC601	MS, NM	Watershed	Low	TMDL Approved on 9/11/2000
4a	South Fork Nemaha River Near Seneca	Aquatic Life	Selenium	SC682	NM, PT	Watershed	Low	TMDL Approved on 8/28/2001

2010 303(d) List of All Impaired/Potentially Impaired Waters Missouri Basin

10240008

Big Nemaha

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Walnut Creek Near Reserve	Aquatic Life	Total Phosphorus	SC292	BR, DP	Watershed	High	median value: 0.27 > median flag value:0.201
5	Walnut Creek Near Reserve	Aquatic Life	Total Suspended Solids	SC292	BR, DP	Watershed	High	median value: 53 > median flag value:50
5	Roys Creek Near Reserve	Aquatic Life	Copper	SC552	BR, DP	Watershed	Low	Several violations
5	Roys Creek Near Reserve	Aquatic Life	Zinc	SC552	BR, DP	Watershed	Low	
4a	Pony Creek Lake	Aquatic Life	Eutrophication	LM073001	BR	Lake	High	TMDL Approved on 2/28/2008
4a	Walnut Creek Near Reserve	Recreation	Fecal Coli	SC292	BR, DP	Watershed	High	TMDL Approved on 8/28/2001

2010 303(d) List of All Impaired/Potentially Impaired Waters Missouri Basin

10240011

Independence-Sugar

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Atchison Co. SFL	Aquatic Life	Atrazine	LM012601	AT	Lake	Low	
5	Atchison Co. SFL	Aquatic Life	Copper	LM012601	AT	Lake	Low	
5	Jerry's Lake	Aquatic Life	Eutrophication	LM067801	LV	Lake	Low	
5	Lake Warnock (Atchison City Lake)	Aquatic Life	Eutrophication	LM039801	AT	Lake	Low	
5	Atchison Co. SFL	Aquatic Life	pH	LM012601	AT	Lake	Low	
4a	Atchison Co. SFL	Recreation	Aquatic Plants	LM012601	AT	Lake	Low	TMDL Approved on 8/28/2001
4a	Atchison Co. SFL	Aquatic Life	Dissolved Oxygen	LM012601	AT	Lake	Low	TMDL Approved on 8/28/2001
4a	Atchison Co. SFL	Aquatic Life	Eutrophication	LM012601	AT	Lake	Low	TMDL Approved on 8/28/2001
4a	Big Eleven Lake	Aquatic Life	Eutrophication	LM067101	WY	Lake	Low	TMDL Approved on 8/28/2001
4a	Lansing City Lake	Aquatic Life	Eutrophication	LM067201	LV	Lake	Low	TMDL Approved on 8/28/2001
4a	Wyandotte Co. Lake	Aquatic Life	Eutrophication	LM042401	WY	Lake	High	TMDL Approved on 2/28/2008
4a	Lansing City Lake	Aquatic Life	pH	LM067201	LV	Lake	Low	TMDL Approved on 8/28/2001
4a	Atchison Co. SFL	Water Supply	Siltation	LM012601	AT	Lake	High	TMDL Approved on 2/28/2008
3	Lansing City Lake	Aquatic Life	Copper	LM067201	LV	Lake		Only 1 sample since 1995

2010 303(d) List of All Impaired/Potentially Impaired Waters Missouri Basin

10300101

Lower Missouri-Crooked

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Blue River Near Stanley	Aquatic Life	Dissolved Oxygen	SC205	JO	Watershed	High	
5	Indian Creek Near Leawood	Aquatic Life	Total Phosphorus	SC204	JO	Watershed	High	median value: 1.459 > median flag value:0.201
5	Indian Creek Near Leawood	Water Supply	Chloride	SC204	JO	Watershed	Low	
5	Blue River Near Stanley	Food Procurement	Mercury	SC205	JO	Watershed	Low	Fish consumption advisory
4a	Blue River Near Stanley	Aquatic Life	Biology	SC205	JO	Watershed	Medium	TMDL Approved on 8/28/2001
4a	South Lake Park	Aquatic Life	Eutrophication	LM067501	JO	Lake	Low	TMDL Approved on 8/28/2001
4a	Blue River Near Stanley	Recreation	Fecal Coli	SC205	JO	Watershed	Medium	TMDL Approved on 8/28/2001
4a	Indian Creek Near Leawood	Recreation	Fecal Coli	SC204	JO	Watershed	Medium	TMDL Approved on 8/28/2001
4a	Indian Creek Near Leawood	Water Supply	Nitrate	SC204	JO	Watershed	High	TMDL Approved on 2/28/2008
3	Blue River Near Stanley	Aquatic Life	Diazinon	SC205	JO	Watershed	Low	
3	Indian Creek Near Leawood	Aquatic Life	Diazinon	SC204	JO	Watershed	Low	
3	Heritage Park Lake	Aquatic Life	Eutrophication	LM062401	JO	Lake		Only 1 sample since 1995
3	Stohl Park Lake	Aquatic Life	Lead	LM062801	JO	Lake		Only 1 sample since 1995

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070201

Neosho Headwaters

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Neosho River At Neosho Rapids	Aquatic Life	Biology	SC273	LY	Watershed	Low	
5	Munkers Creek Near Council Grove	Aquatic Life	Dissolved Oxygen	SC631	WB, MR, LY	Watershed	Low	
5	Rock Creek Near Dunlap	Aquatic Life	Dissolved Oxygen	SC629	WB, MR, LY	Watershed	Low	
5	Flint Hills N.W.R.	Water Supply	Siltation	LM072401	CF	Lake	Low	
5	Neosho River At Neosho Rapids	Aquatic Life	Total Phosphorus	SC273	LY	Watershed	Low	median value: 0.382 > median flag value:0.201
5	Neosho River Near Parkerville	Aquatic Life	Total Phosphorus	SC637	MR	Watershed	Low	median value: 0.2275 > median flag value:0.201
5	Four Mile Creek Near Council Grove	Aquatic Life	Zinc	SC630	MR	Watershed	Low	
5	Lairds Creek Near Kelso	Aquatic Life	Zinc	SC632	MR	Watershed	Low	
4a	Allen Creek Near Emporia	Aquatic Life	Copper	SC628	LY	Watershed	Low	TMDL Approved on 2/25/2005
4a	Eagle Creek Near Hartford	Aquatic Life	Copper	SC740	LY	Watershed	Low	TMDL Approved on 2/25/2005
4a	Eagle Creek Near Olpe	Aquatic Life	Copper	SC634	LY	Watershed	Low	TMDL Approved on 2/25/2005
4a	Neosho River Near Parkerville	Aquatic Life	Copper	SC637	MR	Watershed	Low	TMDL Approved on 2/25/2005
4a	Allen Creek Near Emporia	Aquatic Life	Dissolved Oxygen	SC628	LY	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Eagle Creek Near Hartford	Aquatic Life	Dissolved Oxygen	SC740	LY	Watershed	High	TMDL Approved on 9/30/2002
4a	Eagle Creek Near Olpe	Aquatic Life	Dissolved Oxygen	SC634	LY	Watershed	High	TMDL Approved on 9/30/2002
4a	Council Grove Lake	Aquatic Life	Eutrophication	LM022001	MR	Lake	High	TMDL Approved on 9/30/2009

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070201

Neosho Headwaters

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	John Redmond Lake	Aquatic Life	Eutrophication	LM026001	LY, CF	Lake	Medium	TMDL Approved on 2/27/2003
4a	Jones Park Lake	Aquatic Life	Eutrophication	LM068701	LY	Lake	Low	TMDL Approved on 1/6/2005
4a	Olpe City Lake	Aquatic Life	Eutrophication	LM041001	LY	Lake	High	TMDL Approved on 1/6/2005
4a	Allen Creek Near Emporia	Recreation	Fecal Coli	SC628	LY	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Neosho River Near Parkerville	Recreation	Fecal Coli	SC637	MR	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Council Grove Lake	Water Supply	Siltation	LM022001	MR	Lake	High	TMDL Approved on 9/30/2002
4a	John Redmond Lake	Water Supply	Siltation	LM026001	LY, CF	Lake	Medium	TMDL Approved on 2/27/2003
4a	Olpe City Lake	Water Supply	Siltation	LM041001	LY	Lake	High	TMDL Approved on 1/6/2005
3	Eagle Creek Near Olpe	Aquatic Life	Atrazine	SC634	LY	Watershed		Recent Trends indicate concern
3	Four Mile Creek Near Council Grove	Aquatic Life	Atrazine	SC630	MR	Watershed		Recent Trends indicate concern
3	Munkers Creek Near Council Grove	Aquatic Life	Copper	SC631	WB, MR, LY	Watershed		

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070202

Upper Cottonwood

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Mud Creek Near Marion	Aquatic Life	Atrazine	SC691	MN	Watershed	Low	
5	Cedar Creek Near Cedar Point	Aquatic Life	Copper	SC583	MN, CS	Watershed	Low	
5	Mud Creek Near Marion	Water Supply	Sulfate	SC691	MN	Watershed	Low	
5	South Cottonwood River Near Canada	Aquatic Life	Total Phosphorus	SC635	MN, CS	Watershed	Low	median value: 0.219 > median flag value:0.201
5	Cedar Creek Near Cedar Point	Aquatic Life	Zinc	SC583	MN, CS	Watershed	Low	
4a	North Cottonwood River Near Durham	Aquatic Life	Copper	SC636	MP, MN, HV	Watershed	Low	TMDL Approved on 2/25/2005
4a	French Creek Near Hillsboro	Aquatic Life	Dissolved Oxygen	SC676	MN	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Marion Co. Lake	Aquatic Life	Dissolved Oxygen	LM012101	MN	Lake	Medium	TMDL Approved on 9/30/2002
4a	Marion Co. Lake	Aquatic Life	Eutrophication	LM012101	MN	Lake	Medium	TMDL Approved on 9/30/2002
4a	Marion Lake	Aquatic Life	Eutrophication	LM020001	MN	Lake	High	TMDL Approved on 9/30/2009
4a	Mud Creek Near Marion	Recreation	Fecal Coli	SC691	MN	Watershed	High	TMDL Approved on 12/13/2002
4a	South Cottonwood River Near Canada	Recreation	Fecal Coli	SC635	MN, CS	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Clear Creek Near Marion	Water Supply	Sulfate	SC690	MR, MN	Watershed	Low	TMDL Approved on 12/13/2002
4a	Doyle Creek Near Florence	Water Supply	Sulfate	SC120	HV	Watershed	Low	TMDL Approved on 12/13/2002
4a	French Creek Near Hillsboro	Water Supply	Sulfate	SC676	MN	Watershed	Low	TMDL Approved on 12/13/2002
4a	South Cottonwood River Near Canada	Water Supply	Sulfate	SC635	MN, CS	Watershed	Low	TMDL Approved on 12/13/2002

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

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Upper Cottonwood

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Doyle Creek	Aquatic Life	Ammonia	NPDES51705	MN	Facility		NPDES Permit-Lagoon Study Pending
3	Clear Creek Near Marion	Aquatic Life	Atrazine	SC690	MR, MN	Watershed		Recent Trends indicate concern
3	Doyle Creek	Aquatic Life	Dissolved Oxygen	NPDES51705	MN	Facility		NPDES Permit-Lagoon Study Pending
3	Doyle Creek	Recreation	Fecal Coli	NPDES51705	MN	Facility		NPDES Permit-Lagoon Study Pending
3	North Cottonwood River Near Durham	Water Supply	Sulfate	SC636	MP, MN, HV	Watershed		

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070203

Lower Cottonwood

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Cottonwood River Near Elmdale	Aquatic Life	Atrazine	SC627	MN, CS	Watershed	Low	
5	Cottonwood River Near Emporia	Aquatic Life	Biology	SC274	LY, CS	Watershed	Low	
5	Bloody Creek Near Saffordville	Water Supply	Sulfate	SC689	CS	Watershed	Low	
5	Cottonwood River Near Emporia	Aquatic Life	Total Phosphorus	SC274	LY, CS	Watershed	Low	median value: 0.559 > median flag value:0.201
5	Cottonwood River Near Plymouth	Aquatic Life	Total Suspended Solids	SC275	CS	Watershed	Low	median value: 51 > median flag value:50
4a	Fox Creek Near Strong City	Aquatic Life	Biology	SC718	CS	Watershed	Medium	TMDL Approved on 1/6/2005
4a	Palmer Creek Near Strong City	Aquatic Life	Biology	SC719	CS	Watershed	Medium	TMDL Approved on 1/6/2005
4a	South Fork Cottonwood River Near Bazaar	Aquatic Life	Biology	SC582	CS	Watershed	Medium	TMDL Approved on 1/6/2005, SB357
4a	Cottonwood River Near Elmdale	Recreation	Fecal Coli	SC627	MN, CS	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Cottonwood River Near Plymouth	Recreation	Fecal Coli	SC275	CS	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Diamond Creek Near Strong City	Recreation	Fecal Coli	SC625	MR, CS	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Cottonwood River Near Elmdale	Water Supply	Sulfate	SC627	MN, CS	Watershed	Low	TMDL Approved on 12/13/2002
4a	Cottonwood River Near Plymouth	Water Supply	Sulfate	SC275	CS	Watershed	Low	TMDL Approved on 12/13/2002
3	Cottonwood River	Recreation	Fecal Coli	NPDES46728	LY	Facility		Disinfection compliance needs improvement

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070204

Upper Neosho

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Long Creek Near Le Roy	Aquatic Life	Atrazine	SC695	CF	Watershed	Low	Last exceedence occurred in most current sample year:2008
5	Turkey Creek Near Le Roy	Aquatic Life	Copper	SC614	CF, WO	Watershed	Low	
5	Big Creek Near Chanute	Aquatic Life	Dissolved Oxygen	SC611	AL, NO	Watershed	Low	
5	Long Creek Near Le Roy	Aquatic Life	Dissolved Oxygen	SC695	CF	Watershed	Low	
5	Neosho River Near Chanute	Aquatic Life	Lead	SC560	CF, AN, WO, AL	Watershed	Low	
5	Owl Creek Near Humboldt	Aquatic Life	Lead	SC610	WO, WL	Watershed	Low	
5	Deer Creek Near lola	Aquatic Life	Zinc	SC609	AN, AL	Watershed	Low	
5	Neosho River Near Chanute	Aquatic Life	Zinc	SC560	CF, AN, WO, AL	Watershed	Low	
5	Owl Creek Near Humboldt	Aquatic Life	Zinc	SC610	WO, WL	Watershed	Low	
4a	Gridley City Lake	Water Supply	Berylium	LM045601	CF	Lake	Low	TMDL Approved on 1/6/2005
4a	Big Creek Near Le Roy	Aquatic Life	Copper	SC615	CF	Watershed	Low	TMDL Approved on 2/25/2005
4a	Neosho River Near Chanute	Aquatic Life	Copper	SC560	CF, AN, WO, AL	Watershed	Low	TMDL Approved on 2/25/2005
4a	Neosho River Near Chanute	Aquatic Life	Copper	SC271	WL, NO	Watershed	Low	TMDL Approved on 2/25/2005
4a	Owl Creek Near Humboldt	Aquatic Life	Copper	SC610	WO, WL	Watershed	Low	TMDL Approved on 2/25/2005
4a	Chanute Santa Fe Lake	Aquatic Life	Dissolved Oxygen	LM044401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Gridley City Lake	Aquatic Life	Dissolved Oxygen	LM045601	CF	Lake	Medium	TMDL Approved on 9/30/2002
4a	Turkey Creek Near Le Roy	Aquatic Life	Dissolved Oxygen	SC614	CF, WO	Watershed	High	TMDL Approved on 9/30/2002

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070204

Upper Neosho

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Chanute Santa Fe Lake	Aquatic Life	Eutrophication	LM044401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Gridley City Lake	Aquatic Life	Eutrophication	LM045601	CF	Lake	Medium	TMDL Approved on 9/30/2002
4a	Big Creek Near Le Roy	Recreation	Fecal Coli	SC615	CF	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Deer Creek Near Iola	Recreation	Fecal Coli	SC609	AN, AL	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Owl Creek Near Humboldt	Recreation	Fecal Coli	SC610	WO, WL	Watershed	Medium	TMDL Approved on 12/13/2002
4a	Turkey Creek Near Le Roy	Recreation	Fecal Coli	SC614	CF, WO	Watershed	High	TMDL Approved on 12/13/2002
4a	Chanute Santa Fe Lake	Aquatic Life	pH	LM044401	NO	Lake	Medium	TMDL Approved on 9/30/2002
3	Little Turkey Creek	Aquatic Life	Ammonia	NPDES80837	NO	Facility		Evaluate for 2012 303(d) list
3	Owl Creek	Aquatic Life	Ammonia	NPDES97446	WO	Facility		Evaluate for 2012 303(d) list
3	Big Creek Near Chanute	Aquatic Life	Copper	SC611	AL, NO	Watershed		
3	Little Turkey Creek	Recreation	Fecal Coli	NPDES80837	NO	Facility		Evaluate for 2012 303(d) list

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070205

Middle Neosho

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Lightning Creek Near Oswego	Aquatic Life	Atrazine	SC565	CR, CK	Watershed	Low	
5	Canville Creek Near Shaw	Aquatic Life	Copper	SC612	AL, NO	Watershed	Low	
5	Neosho W.A.	Aquatic Life	Copper	LM053401	NO	Lake	Low	
5	Mined Land Lake 19	Aquatic Life	Eutrophication	LM036501	CK	Lake	Low	
5	Mined Land Lake 24	Aquatic Life	Eutrophication	LM037001	CK	Lake	Low	
5	Mined Land Lake 25	Aquatic Life	Eutrophication	LM037101	CK	Lake	Low	
5	Mined Land Lake 26	Aquatic Life	Eutrophication	LM037201	CK	Lake	Low	
5	Mined Land Lake 31	Aquatic Life	Eutrophication	LM037701	CK	Lake	Low	
5	Mined Land Lake 34	Aquatic Life	Eutrophication	LM038001	CK	Lake	Low	
5	Mined Land Lake 35	Aquatic Life	Eutrophication	LM038101	CK	Lake	Low	
5	Mined Land Lake 36	Aquatic Life	Eutrophication	LM038201	CK	Lake	Low	
5	Mined Land Lake 40	Aquatic Life	Eutrophication	LM038601	CK	Lake	Low	
5	Mined Land Lake 41	Aquatic Life	Eutrophication	LM038701	CK	Lake	Low	
5	Parsons Lake	Aquatic Life	Lead	LM041401	NO	Lake	Low	
5	Mined Land Lake 22	Food Procurement	Perchlorate	LM036801	CK	Lake	Low	Fish consumption advisory
5	Mined Land Lake WA	Water Supply	Siltation	LM038841	CK	Lake	Low	
5	Cherry Creek Near Faulkner	Water Supply	Sulfate	SC605	CK	Watershed	Low	
5	Lightning Creek Near Oswego	Aquatic Life	Temperature	SC565	CR, CK	Watershed	Low	
5	Labette Creek Near Labette	Aquatic Life	Total Phosphorus	SC564	NO, LB	Watershed	Low	median value: 0.3015 > median flag value:0.201
4a	Flat Rock Creek Near St. Paul	Aquatic Life	Copper	SC613	BB, NO, CR	Watershed	Low	TMDL Approved on 2/25/2005

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070205

Middle Neosho

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Bachelor Creek Near Labette	Aquatic Life	Dissolved Oxygen	SC698	LB	Watershed	High	TMDL Approved on 2/25/2005
4a	Canville Creek Near Shaw	Aquatic Life	Dissolved Oxygen	SC612	AL, NO	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Cherry Creek Near Faulkner	Aquatic Life	Dissolved Oxygen	SC605	CK	Watershed	High	TMDL Approved on 9/30/2002
4a	Labette Creek Near Chetopa	Aquatic Life	Dissolved Oxygen	SC571	LB	Watershed	High	TMDL Approved on 9/30/2002
4a	Labette Creek Near Labette	Aquatic Life	Dissolved Oxygen	SC564	NO, LB	Watershed	High	TMDL Approved on 9/30/2002
4a	Mined Land Lake WA	Aquatic Life	Dissolved Oxygen	LM038841	CK	Lake	Low	TMDL Approved on 9/30/2002
4a	Neosho Co. SFL	Aquatic Life	Dissolved Oxygen	LM044601	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Altamont City Main Lake (#1)	Aquatic Life	Eutrophication	LM068001	LB	Lake	Low	TMDL Approved on 9/30/2002
4a	Altamont City West Lake (#3)	Aquatic Life	Eutrophication	LM068201	LB	Lake	Low	TMDL Approved on 9/30/2002
4a	Bartlett City Lake	Aquatic Life	Eutrophication	LM045401	LB	Lake	Low	TMDL Approved on 9/30/2002
4a	Neosho Co. SFL	Aquatic Life	Eutrophication	LM044601	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Neosho W.A.	Aquatic Life	Eutrophication	LM053401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Parsons Lake	Aquatic Life	Eutrophication	LM041401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Neosho W.A.	Aquatic Life	Lead	LM053401	NO	Lake	Medium	TMDL Approved on 1/6/2005
4a	Neosho Co. SFL	Aquatic Life	pH	LM044601	NO	Lake	Medium	TMDL Approved on 9/30/2002

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070205

Middle Neosho

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Neosho W.A.	Aquatic Life	pH	LM053401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Neosho W.A.	Water Supply	Siltation	LM053401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Parsons Lake	Water Supply	Siltation	LM041401	NO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Mined Land Lake WA	Water Supply	Sulfate	LM038841	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 12	Water Supply	Sulfate	LM035901	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 17	Water Supply	Sulfate	LM048201	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 22	Water Supply	Sulfate	LM036801	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 23	Water Supply	Sulfate	LM036901	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 27	Water Supply	Sulfate	LM037301	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 30	Water Supply	Sulfate	LM037601	CK	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 44	Water Supply	Sulfate	LM048401	CK	Lake	Low	TMDL Approved on 1/6/2005
3	Cherry Creek Near Faulkner	Aquatic Life	Atrazine	SC605	CK	Watershed	Low	Last exceedence occurred in most current sample year:2008
3	Labette Creek Near Labette	Aquatic Life	Diazinon	SC564	NO, LB	Watershed	Low	

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070206

Lake O' The Cherokees

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Tar Creek At Pitcher, Oklahoma	Aquatic Life	Cadmium	SC110	CK	Watershed	Medium	TMDL Approved on 2/25/2005
4a	Tar Creek At Pitcher, Oklahoma	Aquatic Life	Lead	SC110	CK	Watershed	Medium	TMDL Approved on 2/25/2005
4a	Tar Creek At Pitcher, Oklahoma	Aquatic Life	Zinc	SC110	CK	Watershed	Medium	TMDL Approved on 2/25/2005

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070207

Spring

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Turkey Creek Near Joplin, Missouri	Aquatic Life	Dissolved Oxygen	SC211	MISSOURI	Watershed	Low	
5	Mined Land Lake 01	Aquatic Life	Eutrophication	LM035101	CR	Lake	Low	
5	Mined Land Lake 06	Aquatic Life	Eutrophication	LM047601	CR	Lake	Low	
5	Short Creek Near Galena	Water Supply	Fluoride	SC570	CK	Watershed	Low	
5	Short Creek Near Galena	Aquatic Life	Selenium	SC570	CK	Watershed	Low	
5	Cow Creek Near Lawton	Aquatic Life	Total Phosphorus	SC567	CR, CK	Watershed	Low	median value: 0.304 > median flag value:0.201
5	Shoal Creek Near Galena	Aquatic Life	Total Phosphorus	SC212	CK	Watershed	Low	median value: 0.31 > median flag value:0.201
5	Short Creek Near Galena	Aquatic Life	Total Phosphorus	SC570	CK	Watershed	Low	median value: 0.3495 > median flag value:0.201
5	Turkey Creek Near Joplin, Missouri	Aquatic Life	Total Phosphorus	SC211	MISSOURI	Watershed	Low	median value: 0.77 > median flag value:0.201
4a	Spring River Near Baxter Springs	Aquatic Life	Biology	SC213	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Crestline	Aquatic Life	Biology	SC568	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Shawnee Creek Near Crestline	Aquatic Life	Cadmium	SC569	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Short Creek Near Galena	Aquatic Life	Cadmium	SC570	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Turkey Creek Near Joplin, Missouri	Aquatic Life	Cadmium	SC211	MISSOURI	Watershed	High	TMDL Approved on 6/24/2005

2010 303(d) List of All Impaired/Potentially Impaired Waters Neosho Basin

11070207

Spring

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Shawnee Creek Near Crestline	Aquatic Life	Copper	SC569	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Short Creek Near Galena	Aquatic Life	Copper	SC570	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Baxter Springs	Aquatic Life	Copper	SC213	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Crestline	Aquatic Life	Copper	SC568	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Turkey Creek Near Joplin, Missouri	Aquatic Life	Copper	SC211	MISSOURI	Watershed	High	TMDL Approved on 6/24/2005
4a	Shawnee Creek Near Crestline	Aquatic Life	Dissolved Oxygen	SC569	CK	Watershed	High	TMDL Approved on 9/30/2002
4a	Pittsburg College Lake	Aquatic Life	Eutrophication	LM073301	CR	Lake	Low	TMDL Approved on 9/30/2002
4a	Playter's Lake	Aquatic Life	Eutrophication	LM069001	CR	Lake	Low	TMDL Approved on 1/6/2005
4a	Shawnee Creek Near Crestline	Aquatic Life	Lead	SC569	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Shoal Creek Near Galena	Aquatic Life	Lead	SC212	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Short Creek Near Galena	Aquatic Life	Lead	SC570	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Baxter Springs	Aquatic Life	Lead	SC213	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Crestline	Aquatic Life	Lead	SC568	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Turkey Creek Near Joplin, Missouri	Aquatic Life	Lead	SC211	MISSOURI	Watershed	High	TMDL Approved on 6/24/2005
4a	Pittsburg College Lake	Aquatic Life	pH	LM073301	CR	Lake	Low	TMDL Approved on 9/30/2002

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11070207

Spring

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Cow Creek Near Lawton	Water Supply	Sulfate	SC567	CR, CK	Watershed	Low	TMDL Approved on 2/25/2005
4a	Mined Land Lake 06	Water Supply	Sulfate	LM047601	CR	Lake	Low	TMDL Approved on 1/6/2005
4a	Mined Land Lake 07	Water Supply	Sulfate	LM047801	CR	Lake	Low	TMDL Approved on 1/6/2005
4a	Shawnee Creek Near Crestline	Aquatic Life	Zinc	SC569	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Shoal Creek Near Galena	Aquatic Life	Zinc	SC212	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Short Creek Near Galena	Aquatic Life	Zinc	SC570	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Baxter Springs	Aquatic Life	Zinc	SC213	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Spring River Near Crestline	Aquatic Life	Zinc	SC568	CK	Watershed	High	TMDL Approved on 6/24/2005
4a	Turkey Creek Near Joplin, Missouri	Aquatic Life	Zinc	SC211	MISSOURI	Watershed	High	TMDL Approved on 6/24/2005

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260011

Upper North Fork Solomon

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	North Fork Solomon River Near Glade	Water Supply	Arsenic	SC546	PL, NT, TH, SD	Watershed	Low	
5	Bow Creek Near Stockton	Water Supply	Sulfate	SC545	PL, RO, SD, GH	Watershed	Low	
5	Bow Creek Near Stockton	Aquatic Life	Total Phosphorus	SC545	PL, RO, SD, GH	Watershed	Low	median value: 0.24 > median flag value:0.201
5	North Fork Solomon River Near Glade	Aquatic Life	Total Phosphorus	SC546	PL, NT, TH, SD	Watershed	Low	median value: 0.214 > median flag value:0.201
5	Bow Creek Near Stockton	Aquatic Life	Total Suspended Solids	SC545	PL, RO, SD, GH	Watershed	Low	
5	North Fork Solomon River Near Glade	Aquatic Life	Total Suspended Solids	SC546	PL, NT, TH, SD	Watershed	Low	
4a	Kirwin Lake	Aquatic Life	Dissolved Oxygen	LM011001	PL, RO	Lake	Medium	TMDL Approved on 9/30/2003
4a	Kirwin Lake	Aquatic Life	Eutrophication	LM011001	PL, RO	Lake	Medium	TMDL Approved on 9/30/2003
4a	Logan City Lake	Aquatic Life	Eutrophication	LM069301	PL	Lake	Low	TMDL Approved on 9/30/2003
4a	Bow Creek Near Stockton	Aquatic Life	Selenium	SC545	PL, RO, SD, GH	Watershed	Low	TMDL Approved on 1/21/2004
4a	North Fork Solomon River Near Glade	Aquatic Life	Selenium	SC546	PL, NT, TH, SD	Watershed	Low	TMDL Approved on 1/21/2004
4a	North Fork Solomon River Near Glade	Water Supply	Sulfate	SC546	PL, NT, TH, SD	Watershed	Low	TMDL Approved on 1/21/2004
3	Kirwin Lake	Water Supply	Arsenic	LM011001	PL, RO	Lake		Small sample size

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260012

Lower North Fork Solomon

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Beaver Creek Near Gaylord	Water Supply	Arsenic	SC670	SM	Watershed	Low	
5	Deer Creek Near Kirwin	Water Supply	Arsenic	SC721	PL	Watershed	Low	
5	North Fork Solomon River At Portis	Water Supply	Arsenic	SC014	SM, PL	Watershed	Low	
5	North Fork Solomon River At Portis	Aquatic Life	Biology	SC014	SM, PL	Watershed	Low	
5	Beaver Creek Near Gaylord	Aquatic Life	Dissolved Oxygen	SC670	SM	Watershed	Low	
5	Deer Creek Near Kirwin	Aquatic Life	Dissolved Oxygen	SC721	PL	Watershed	Low	
5	Oak Creek Near Cawker City	Aquatic Life	Dissolved Oxygen	SC544	JW, SM	Watershed	Low	
5	North Fork Solomon River At Portis	Recreation	E. coli	SC014	SM, PL	Watershed	Low	GeoMean Exceedence
5	Beaver Creek Near Gaylord	Aquatic Life	Total Phosphorus	SC670	SM	Watershed	Low	median value: 0.332 > median flag value:0.201
5	Deer Creek Near Kirwin	Aquatic Life	Total Phosphorus	SC721	PL	Watershed	Low	median value: 0.511 > median flag value:0.201
5	North Fork Solomon River At Portis	Aquatic Life	Total Phosphorus	SC014	SM, PL	Watershed	Low	median value: 0.261 > median flag value:0.201
5	Oak Creek Near Cawker City	Aquatic Life	Total Phosphorus	SC544	JW, SM	Watershed	Low	median value: 0.213 > median flag value:0.201
5	Twelve Mile Creek Near Downs	Aquatic Life	Total Phosphorus	SC674	SM, OB	Watershed	Low	median value: 0.241 > median flag value:0.201
5	Beaver Creek Near Gaylord	Aquatic Life	Total Suspended Solids	SC670	SM	Watershed	Low	
5	North Fork Solomon River At Portis	Aquatic Life	Total Suspended Solids	SC014	SM, PL	Watershed	Low	

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260012

Lower North Fork Solomon

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Twelve Mile Creek Near Downs	Aquatic Life	Total Suspended Solids	SC674	SM, OB	Watershed	Low	
4a	Beaver Creek Near Gaylord	Aquatic Life	Selenium	SC670	SM	Watershed	Low	TMDL Approved on 1/21/2004
4a	Deer Creek Near Kirwin	Aquatic Life	Selenium	SC721	PL	Watershed	Low	TMDL Approved on 1/21/2004
4a	North Fork Solomon River At Portis	Aquatic Life	Selenium	SC014	SM, PL	Watershed	Low	TMDL Approved on 1/21/2004
4a	Oak Creek Near Cawker City	Aquatic Life	Selenium	SC544	JW, SM	Watershed	Low	TMDL Approved on 1/21/2004
4a	Beaver Creek Near Gaylord	Water Supply	Sulfate	SC670	SM	Watershed	Low	TMDL Approved on 1/21/2004
4a	Deer Creek Near Kirwin	Water Supply	Sulfate	SC721	PL	Watershed	Low	TMDL Approved on 1/21/2004
4a	North Fork Solomon River At Portis	Water Supply	Sulfate	SC014	SM, PL	Watershed	Low	TMDL Approved on 1/21/2004
4a	Oak Creek Near Cawker City	Water Supply	Sulfate	SC544	JW, SM	Watershed	Low	TMDL Approved on 1/21/2004
4a	Twelve Mile Creek Near Downs	Water Supply	Sulfate	SC674	SM, OB	Lake	Low	TMDL Approved on 1/21/2004

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260013

Upper South Fork Solomon

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Sheridan Co. SFL	Water Supply	Arsenic	LM069401	SD	Lake	Low	
5	Webster Lake	Water Supply	Siltation	LM012001	RO	Lake	Low	
4a	Sheridan Co. SFL	Aquatic Life	Dissolved Oxygen	LM069401	SD	Lake	Medium	TMDL Approved on 9/30/2003
4a	Sheridan Co. SFL	Aquatic Life	Eutrophication	LM069401	SD	Lake	Medium	TMDL Approved on 9/30/2003
4a	Webster Lake	Aquatic Life	Eutrophication	LM012001	RO	Lake	Medium	TMDL Approved on 9/30/2003
4a	South Fork Solomon River Near Damar	Aquatic Life	Selenium	SC547	TH, SD, GH	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Damar	Water Supply	Sulfate	SC547	TH, SD, GH	Watershed	Low	TMDL Approved on 1/21/2004
4a	Webster Lake	Water Supply	Sulfate	LM012001	RO	Lake	Low	TMDL Approved on 1/21/2004
3	Webster Lake	Water Supply	Arsenic	LM012001	RO	Lake		2006 only recent impaired year, 2009 data indicates adequate water quality.
3	Webster Lake	Water Supply	Chloride	LM012001	RO	Lake		2006 only impaired year, 2009 data indicates adequate water quality.
3	Webster Lake	Aquatic Life	Selenium	LM012001	RO	Lake		2006 only recent impaired year, 2009 data indicates adequate water quality.

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10260014

Lower South Fork Solomon

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	South Fork Solomon River Near Woodston	Aquatic Life	Dissolved Oxygen	SC737	RO	Watershed	Low	
5	South Fork Solomon River Near Osborne	Recreation	E. coli	SC543	OB	Watershed	Low	GeoMean Exceedence
5	South Fork Solomon River Near Osborne	Recreation	E. coli	SC542	OB, RO, RS	Watershed	Low	GeoMean Exceedence
5	Carr Creek Near Cawker City	Aquatic Life	Total Phosphorus	SC669	OB, MC	Watershed	Low	median value: 0.234 > median flag value:0.201
5	South Fork Solomon River Near Osborne	Aquatic Life	Total Phosphorus	SC543	OB	Watershed	Low	median value: 0.204 > median flag value:0.201
5	Carr Creek Near Cawker City	Aquatic Life	Total Suspended Solids	SC669	OB, MC	Watershed	Low	median value: 76 > median flag value:50
5	South Fork Solomon River Near Osborne	Aquatic Life	Total Suspended Solids	SC543	OB	Watershed	Low	median value: 59 > median flag value:50
4a	South Fork Solomon River Near Osborne	Aquatic Life	Biology	SC542	OB, RO, RS	Watershed	Medium	TMDL Approved on 1/21/2004, SB543
4a	South Fork Solomon River Near Osborne	Aquatic Life	Biology	SC543	OB	Watershed	Medium	TMDL Approved on 1/21/2004
4a	Rooks Co. SFL	Aquatic Life	Dissolved Oxygen	LM011901	RO	Lake	Medium	TMDL Approved on 9/30/2003
4a	Twin Creek Near Corinth	Aquatic Life	Dissolved Oxygen	SC668	OB	Watershed	Medium	TMDL Approved on 1/21/2004
4a	Rooks Co. SFL	Aquatic Life	Eutrophication	LM011901	RO	Lake	Medium	TMDL Approved on 9/30/2003
4a	Carr Creek Near Cawker City	Aquatic Life	Selenium	SC669	OB, MC	Watershed	Low	TMDL Approved on 1/21/2004

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260014

Lower South Fork Solomon

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Covert Creek Near Osborne	Aquatic Life	Selenium	SC666	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	Kill Creek Near Bloomington	Aquatic Life	Selenium	SC665	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Osborne	Aquatic Life	Selenium	SC542	OB, RO, RS	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Osborne	Aquatic Life	Selenium	SC543	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Woodston	Aquatic Life	Selenium	SC737	RO	Watershed	Low	TMDL Approved on 1/21/2004
4a	Twin Creek Near Corinth	Aquatic Life	Selenium	SC668	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	Carr Creek Near Cawker City	Water Supply	Sulfate	SC669	OB, MC	Watershed	Low	TMDL Approved on 1/21/2004
4a	Covert Creek Near Osborne	Water Supply	Sulfate	SC666	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	Kill Creek Near Bloomington	Water Supply	Sulfate	SC665	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Osborne	Water Supply	Sulfate	SC542	OB, RO, RS	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Osborne	Water Supply	Sulfate	SC543	OB	Watershed	Low	TMDL Approved on 1/21/2004
4a	South Fork Solomon River Near Woodston	Water Supply	Sulfate	SC737	RO	Lake	Low	TMDL Approved on 1/21/2004
4a	Twin Creek Near Corinth	Water Supply	Sulfate	SC668	OB	Watershed	Low	TMDL Approved on 1/21/2004

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260015

Solomon River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Solomon River At Niles	Aquatic Life	Biology	SC266	CD, OT, SA	Watershed	Low	
5	Pipe Creek Near Minneapolis	Aquatic Life	Copper	SC651	CD, OT, SA	Watershed	Low	
5	Pipe Creek Near Minneapolis	Aquatic Life	Dissolved Oxygen	SC651	CD, OT, SA	Watershed	Low	
5	Salt Creek Near Minneapolis	Aquatic Life	Dissolved Oxygen	SC512	MC, OT, LC	Watershed	Low	
5	Jewell Co. SFL	Aquatic Life	Eutrophication	LM012801	JW	Lake	Low	
5	Solomon River Near Glasco	Aquatic Life	Selenium	SC511	JW, CD, MC	Watershed	Low	Last exceedence occurred in most current sample year:2009
5	Jewell Co. SFL	Water Supply	Siltation	LM012801	JW	Lake	Low	
5	Limestone Creek Near Glen Elder	Aquatic Life	Total Phosphorus	SC667	JW	Watershed	Low	median value: 0.335 > median flag value:0.201
5	Salt Creek Near Minneapolis	Aquatic Life	Total Phosphorus	SC512	MC, OT, LC	Watershed	Low	median value: 0.3505 > median flag value:0.201
5	Solomon River At Niles	Aquatic Life	Total Phosphorus	SC266	CD, OT, SA	Watershed	Low	median value: 0.308 > median flag value:0.201
5	Solomon River Near Glasco	Aquatic Life	Total Phosphorus	SC511	JW, CD, MC	Watershed	Low	
5	Limestone Creek Near Glen Elder	Aquatic Life	Total Suspended Solids	SC667	JW	Watershed	Low	
5	Salt Creek Near Minneapolis	Aquatic Life	Total Suspended Solids	SC512	MC, OT, LC	Watershed	Low	median value: 81 > median flag value:50
5	Solomon River At Niles	Aquatic Life	Total Suspended Solids	SC266	CD, OT, SA	Watershed	Low	median value: 106 > median flag value:50

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260015

Solomon River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Solomon River Near Glasco	Aquatic Life	Total Suspended Solids	SC511	JW, CD, MC	Watershed	Low	median value: 63 > median flag value:50
5	Pipe Creek Near Minneapolis	Aquatic Life	Zinc	SC651	CD, OT, SA	Watershed	Low	
4a	Ottawa Co. SFL	Recreation	Aquatic Plants	LM014101	OT	Lake	Medium	TMDL Approved on 9/30/2003
4a	Salt Creek Near Minneapolis	Water Supply	Chloride	SC512	MC, OT, LC	Watershed	Low	TMDL Approved on 1/21/2004
4a	Solomon River At Niles	Water Supply	Chloride	SC266	CD, OT, SA	Watershed	Low	TMDL Approved on 1/21/2004
4a	Solomon River Near Glasco	Water Supply	Chloride	SC511	JW, CD, MC	Watershed	Low	TMDL Approved on 1/21/2004
4a	Limestone Creek Near Glen Elder	Aquatic Life	Dissolved Oxygen	SC667	JW	Watershed	High	TMDL Approved on 8/7/2003
4a	Ottawa Co. SFL	Aquatic Life	Dissolved Oxygen	LM014101	OT	Lake	Medium	TMDL Approved on 9/30/2003
4a	Ottawa Co. SFL	Aquatic Life	Eutrophication	LM014101	OT	Lake	Medium	TMDL Approved on 9/30/2003
4a	Waconda Lake	Aquatic Life	Eutrophication	LM018001	OB, MC	Lake	Medium	TMDL Approved on 9/30/2003
4a	Limestone Creek Near Glen Elder	Aquatic Life	Selenium	SC667	JW	Watershed	Low	TMDL Approved on 1/21/2004
4a	Limestone Creek Near Glen Elder	Water Supply	Sulfate	SC667	JW	Watershed	Low	TMDL Approved on 1/21/2004
4a	Salt Creek Near Minneapolis	Water Supply	Sulfate	SC512	MC, OT, LC	Watershed	Low	TMDL Approved on 1/21/2004
4a	Solomon River At Niles	Water Supply	Sulfate	SC266	CD, OT, SA	Watershed	Low	TMDL Approved on 1/21/2004
4a	Solomon River Near Glasco	Water Supply	Sulfate	SC511	JW, CD, MC	Watershed	Low	TMDL Approved on 1/21/2004

2010 303(d) List of All Impaired/Potentially Impaired Waters Solomon Basin

10260015

Solomon River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Waconda Lake	Water Supply	Sulfate	LM018001	OB, MC	Lake	Low	TMDL Approved on 1/21/2004
3	Limestone Creek Near Glen Elder	Aquatic Life	Atrazine	SC667	JW	Watershed		Recent Trends indicate concern
3	Solomon River at Beloit	Aquatic Life	Atrazine	PWS2012301	MC	Watershed		Needs increased collection frequency

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10260001

Smoky Hill Headwaters

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Willow Creek Near Weskan	Aquatic Life	Dissolved Oxygen	SC724	WA	Watershed	Low	
5	Willow Creek Near Weskan	Water Supply	Fluoride	SC724	WA	Watershed	Low	

10260002

North Fork Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Smoky Hill Garden Lake	Aquatic Life	Eutrophication	LM070101	SH	Lake	Low	TMDL Approved on 9/30/2003
3	Smoky Hill Garden Lake	Water Supply	Fluoride	LM070101	SH	Lake		Small sample size

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260003

Upper Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Smoky Hill River Near Trego	Recreation	E. coli	SC550	LG, GO, TR	Watershed	Low	GeoMean Exceedence
5	Smoky Hill River Near Gove	Water Supply	Fluoride	SC739	LG, GO, SC, LE	Watershed	Low	
5	Smoky Hill River At Elkader	Aquatic Life	Total Suspended Solids	SC224	LG, WA, WH	Watershed	Low	median value: 76 > median flag value:50
4a	Smoky Hill River Near Gove	Aquatic Life	Dissolved Oxygen	SC739	LG, GO, SC, LE	Watershed	Medium	TMDL Approved on 11/15/2004
4a	Smoky Hill River Near Trego	Aquatic Life	Dissolved Oxygen	SC550	LG, GO, TR	Watershed	Medium	TMDL Approved on 11/15/2004
4a	Cedar Bluff Lake	Aquatic Life	Eutrophication	LM013001	TR, NS	Lake	Medium	TMDL Approved on 9/30/2003
4a	Smoky Hill River At Elkader	Water Supply	Fluoride	SC224	LG, WA, WH	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River At Elkader	Aquatic Life	Selenium	SC224	LG, WA, WH	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River Near Gove	Aquatic Life	Selenium	SC739	LG, GO, SC, LE	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River Near Trego	Aquatic Life	Selenium	SC550	LG, GO, TR	Watershed	Low	TMDL Approved on 11/15/2004
4a	Cedar Bluff Lake	Water Supply	Sulfate	LM013001	TR, NS	Lake	Low	TMDL Approved on 3/3/2004
4a	Smoky Hill River At Elkader	Water Supply	Sulfate	SC224	LG, WA, WH	Watershed	Low	TMDL Approved on 3/3/2004
4a	Smoky Hill River Near Gove	Water Supply	Sulfate	SC739	LG, GO, SC, LE	Lake	Low	TMDL Approved on 3/3/2004
4a	Smoky Hill River Near Trego	Water Supply	Sulfate	SC550	LG, GO, TR	Watershed	Low	TMDL Approved on 3/3/2004

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10260004

Ladder Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Lake Scott State Park	Water Supply	Arsenic	LM011201	SC	Lake	Low	
5	Lake Scott State Park	Water Supply	Fluoride	LM011201	SC	Lake	Low	
4a	Lake Scott State Park	Recreation	Aquatic Plants	LM011201	SC	Lake	High	TMDL Approved on 8/7/2003
4a	Lake Scott State Park	Aquatic Life	Eutrophication	LM011201	SC	Lake	High	TMDL Approved on 8/7/2003
4a	Lake Scott State Park	Aquatic Life	pH	LM011201	SC	Lake	High	TMDL Approved on 8/7/2003

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10260006

Middle Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Fossil Creek Near Russell	Water Supply	Arsenic	SC713	RS	Watershed	Low	Last exceedence occurred in most current sample year:2006
5	Smoky Hill River At Ellsworth	Aquatic Life	Biology	SC269	EW	Watershed	Low	
5	Coal Creek Near Wilson	Aquatic Life	Dissolved Oxygen	SC733	RS, BT	Watershed	Low	
5	Fossil Creek Near Russell	Aquatic Life	Selenium	SC713	RS	Watershed	Low	
5	Landon Creek Near Russell	Aquatic Life	Selenium	SC714	RS, BT	Watershed	Low	
5	Sellens Creek Near Russell	Aquatic Life	Selenium	SC736	RS, BT	Watershed	Low	
5	Smoky Hill River Near Russell	Aquatic Life	Selenium	SC007	RS, EL, RH	Watershed	Low	
5	Smoky Hill River Near Schoenchen	Aquatic Life	Selenium	SC539	EL, TR	Watershed	Low	
5	Smoky Hill River Near Wilson	Aquatic Life	Selenium	SC723	BT	Watershed	Low	
5	Fossil Creek Near Russell	Aquatic Life	Total Phosphorus	SC713	RS	Watershed	Low	median value: 1.08 > median flag value:0.201
5	Smoky Hill River Near Russell	Aquatic Life	Total Phosphorus	SC007	RS, EL, RH	Watershed	Low	median value: 0.2695 > median flag value:0.201
5	Coal Creek Near Wilson	Aquatic Life	Total Suspended Solids	SC733	RS, BT	Watershed	Low	median value: 86 > median flag value:50
4a	Coal Creek Near Wilson	Water Supply	Chloride	SC733	RS, BT	Watershed	Low	TMDL Approved on 11/15/2004
4a	Fossil Creek Near Russell	Water Supply	Chloride	SC713	RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Kanopolis Lake	Water Supply	Chloride	LM016001	EW	Lake	Low	TMDL Approved on 11/15/2004

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260006

Middle Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Landon Creek Near Russell	Water Supply	Chloride	SC714	RS, BT	Watershed	Low	TMDL Approved on 11/15/2004
4a	Sellens Creek Near Russell	Water Supply	Chloride	SC736	RS, BT	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River At Ellsworth	Water Supply	Chloride	SC269	EW	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River Near Russell	Water Supply	Chloride	SC007	RS, EL, RH	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River Near Wilson	Water Supply	Chloride	SC723	BT	Watershed	Low	TMDL Approved on 1/21/2004
4a	Fossil Lake	Aquatic Life	Eutrophication	LM052601	RS	Lake	Low	TMDL Approved on 9/30/2003
4a	Kanopolis Lake	Aquatic Life	Eutrophication	LM016001	EW	Lake	High	TMDL Approved on 8/7/2003
4a	Fossil Lake	Water Supply	Siltation	LM052601	RS	Lake	Low	TMDL Approved on 9/30/2003
4a	Coal Creek Near Wilson	Water Supply	Sulfate	SC733	RS, BT	Watershed	Low	TMDL Approved on 3/3/2004
4a	Fossil Creek Near Russell	Water Supply	Sulfate	SC713	RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Kanopolis Lake	Water Supply	Sulfate	LM016001	EW	Lake	Low	TMDL Approved on 3/3/2004
4a	Landon Creek Near Russell	Water Supply	Sulfate	SC714	RS, BT	Watershed	Low	TMDL Approved on 3/3/2004
4a	Sellens Creek Near Russell	Water Supply	Sulfate	SC736	RS, BT	Watershed	Low	TMDL Approved on 3/3/2004
4a	Smoky Hill River At Ellsworth	Water Supply	Sulfate	SC269	EW	Watershed	Low	TMDL Approved on 3/3/2004
4a	Smoky Hill River Near Russell	Water Supply	Sulfate	SC007	RS, EL, RH	Watershed	Low	TMDL Approved on 3/3/2004

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10260006

Middle Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Smoky Hill River Near Schoenchen	Water Supply	Sulfate	SC539	EL, TR	Watershed	Low	TMDL Approved on 3/3/2004
4a	Smoky Hill River Near Wilson	Water Supply	Sulfate	SC723	BT	Watershed	Low	TMDL Approved on 3/3/2004

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10260007

Big Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Big Creek Near Munjor	Recreation	E. coli	SC540	EL, TR	Watershed	Low	GeoMean Exceedence
5	Big Creek Near Munjor	Water Supply	Nitrate	SC540	EL, TR	Watershed	Low	
5	Big Creek Near Munjor	Aquatic Life	Total Phosphorus	SC540	EL, TR	Watershed	Low	median value: 1.365 > median flag value:0.201
5	North Fork Big Creek Near Walker	Aquatic Life	Total Phosphorus	SC715	EL	Watershed	Low	median value: 0.492 > median flag value:0.201
5	Big Creek Near Munjor	Aquatic Life	Total Suspended Solids	SC540	EL, TR	Watershed	Low	median value: 82 > median flag value:50
4a	North Fork Big Creek Near Walker	Water Supply	Chloride	SC715	EL	Watershed	Low	TMDL Approved on 11/15/2004
4a	Big Creek Oxbow	Aquatic Life	Eutrophication	LM070301	EL	Lake	Low	TMDL Approved on 9/30/2003
4a	Ellis City Lake	Aquatic Life	Eutrophication	LM069601	EL	Lake	Low	TMDL Approved on 9/30/2003
4a	North Fork Big Creek Near Walker	Water Supply	Sulfate	SC715	EL	Watershed	Low	TMDL Approved on 3/3/2004
3	North Fork Big Creek Near Walker	Water Supply	Arsenic	SC715	EL	Watershed		
3	North Fork Big Creek Near Walker	Aquatic Life	Selenium	SC715	EL	Watershed		
3	Big Creek Near Munjor	Water Supply	Sulfate	SC540	EL, TR	Watershed		

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10260008

Lower Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Smoky Hill River At Junction City	Aquatic Life	Biology	SC264	GE, DK	Watershed	Low	
5	Gypsum Creek Near Solomon	Aquatic Life	Dissolved Oxygen	SC641	SA, MP	Watershed	Low	
5	Mud Creek Near Abilene	Aquatic Life	Dissolved Oxygen	SC643	DK	Watershed	Low	
5	Turkey Creek Near Abilene	Aquatic Life	Dissolved Oxygen	SC644	DK, MN	Watershed	Low	
5	Smoky Hill River Near Mentor	Recreation	E. coli	SC514	SA, EW, MP	Watershed	Low	GeoMean Exceedence
5	Smoky Hill River At Junction City	Aquatic Life	Lead	SC264	GE, DK	Watershed	Low	Last exceedence occurred in most current sample year:2007
5	Smoky Hill River Near Salina	Water Supply	Nitrate	SC268	SA, MP	Watershed	Low	
5	Herington Reservoir	Water Supply	Siltation	LM047201	DK	Lake	Low	
5	Lyon Creek Near Wreford	Aquatic Life	Total Phosphorus	SC516	GE, CK, MR, MN	Watershed	Low	
5	Mud Creek Near Abilene	Aquatic Life	Total Phosphorus	SC643	DK	Watershed	Low	median value: 0.25 > median flag value:0.201
5	Smoky Hill River At Enterprise	Aquatic Life	Total Phosphorus	SC265	DK, SA	Watershed	Low	median value: 0.3185 > median flag value:0.201
5	Smoky Hill River At Junction City	Aquatic Life	Total Phosphorus	SC264	GE, DK	Watershed	Low	median value: 0.321 > median flag value:0.201
5	Smoky Hill River Near Salina	Aquatic Life	Total Phosphorus	SC268	SA, MP	Watershed	Low	median value: 0.3615 > median flag value:0.201
5	Chapman Creek Near Sutphen	Aquatic Life	Total Suspended Solids	SC515	CY, OT, DK	Watershed	Low	median value: 50.5 > median flag value:50

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10260008

Lower Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Smoky Hill River At Enterprise	Aquatic Life	Total Suspended Solids	SC265	DK, SA	Watershed	Low	median value: 102.5 > median flag value:50
5	Smoky Hill River At Junction City	Aquatic Life	Total Suspended Solids	SC264	GE, DK	Watershed	Low	median value: 190 > median flag value:50
5	Smoky Hill River Near Mentor	Aquatic Life	Total Suspended Solids	SC514	SA, EW, MP	Watershed	Low	median value: 67 > median flag value:50
5	Smoky Hill River Near Salina	Aquatic Life	Total Suspended Solids	SC268	SA, MP	Watershed	Low	median value: 69 > median flag value:50
4a	McPherson Co. SFL	Recreation	Aquatic Plants	LM013501	MP	Lake	Medium	TMDL Approved on 9/30/2003
4a	Herrington Reservoir	Aquatic Life	Atrazine	LM047201	DK	Lake	Medium	TMDL Approved on 9/30/2003
4a	Smoky Hill River At Enterprise	Aquatic Life	Biology	SC265	DK, SA	Watershed	Medium	TMDL Approved on 3/3/2004
4a	Smoky Hill River Near Salina	Aquatic Life	Biology	SC268	SA, MP	Watershed	Medium	TMDL Approved on 3/3/2004
4a	Smoky Hill River At Enterprise	Water Supply	Chloride	SC265	DK, SA	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River At Junction City	Water Supply	Chloride	SC264	GE, DK	Watershed	Low	TMDL Approved on 11/15/2004
4a	Herrington Reservoir	Aquatic Life	Dissolved Oxygen	LM047201	DK	Lake	High	TMDL Approved on 8/7/2003
4a	Holland Creek Near Sand Springs	Aquatic Life	Dissolved Oxygen	SC642	DK	Watershed	High	TMDL Approved on 8/7/2003
4a	McPherson Co. SFL	Aquatic Life	Dissolved Oxygen	LM013501	MP	Lake	Medium	TMDL Approved on 9/30/2003
4a	Geary Co. SFL	Aquatic Life	Eutrophication	LM043201	GE	Lake	Medium	TMDL Approved on 9/30/2003

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260008

Lower Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Herington City Lake	Aquatic Life	Eutrophication	LM069701	DK	Lake	Low	TMDL Approved on 9/30/2003
4a	Herington City Park Lake	Aquatic Life	Eutrophication	LM072801	DK	Lake	Low	TMDL Approved on 9/30/2003
4a	Herington Reservoir	Aquatic Life	Eutrophication	LM047201	DK	Lake	High	TMDL Approved on 8/7/2003
4a	Lakewood Park Lake	Aquatic Life	Eutrophication	LM069801	SA	Lake	Low	TMDL Approved on 9/30/2003
4a	McPherson Co. SFL	Aquatic Life	Eutrophication	LM013501	MP	Lake	Medium	TMDL Approved on 9/30/2003
4a	McPherson Co. SFL	Aquatic Life	pH	LM013501	MP	Lake	Medium	TMDL Approved on 9/30/2003
4a	Carry Creek Near Lyona	Water Supply	Sulfate	SC708	DK	Watershed	Low	TMDL Approved on 11/15/2004
4a	Chapman Creek Near Sutphen	Water Supply	Sulfate	SC515	CY, OT, DK	Watershed	Low	TMDL Approved on 11/15/2004
4a	Gypsum Creek Near Solomon	Water Supply	Sulfate	SC641	SA, MP	Watershed	Low	TMDL Approved on 11/15/2004
4a	Holland Creek Near Sand Springs	Water Supply	Sulfate	SC642	DK	Watershed	Low	TMDL Approved on 11/15/2004
4a	Mud Creek Near Abilene	Water Supply	Sulfate	SC643	DK	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River At Enterprise	Water Supply	Sulfate	SC265	DK, SA	Watershed	Low	TMDL Approved on 11/15/2004
4a	Smoky Hill River At Junction City	Water Supply	Sulfate	SC264	GE, DK	Watershed	Low	TMDL Approved on 11/15/2004
4a	Turkey Creek Near Abilene	Water Supply	Sulfate	SC644	DK, MN	Watershed	Low	TMDL Approved on 11/15/2004
3	Herington City Lake	Water Supply	Arsenic	LM069701	DK	Lake		Small sample size
3	Gypsum Creek Near Solomon	Recreation	E. coli	SC641	SA, MP	Watershed		Small sample size

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260008

Lower Smoky Hill

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Holland Creek Near Sand Springs	Recreation	E. coli	SC642	DK	Watershed		Small sample size
3	Turkey Creek Near Abilene	Recreation	E. coli	SC644	DK, MN	Watershed		Small sample size
3	Lakewood Park Lake	Aquatic Life	Lead	LM069801	SA	Lake		Small sample size
3	Lakewood Park Lake	Water Supply	Siltation	LM069801	SA	Lake		Small sample size

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260009

Upper Saline

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Paradise Creek Near Waldo	Aquatic Life	Dissolved Oxygen	SC538	OB, RO, RS	Watershed	Low	
5	Paradise Creek Near Waldo	Aquatic Life	Total Suspended Solids	SC538	OB, RO, RS	Watershed	Low	median value: 67 > median flag value:50
4a	Paradise Creek Near Waldo	Water Supply	Chloride	SC538	OB, RO, RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near Russell	Water Supply	Chloride	SC011	RO, RS, EL	Watershed	Low	TMDL Approved on 11/15/2004
4a	Wilson Lake	Water Supply	Chloride	LM014001	RS	Lake	Low	TMDL Approved on 11/15/2004
4a	Plainville Township Lake	Aquatic Life	Eutrophication	LM070001	RO	Lake	Low	TMDL Approved on 9/30/2003
4a	Sheridan W.A.	Recreation	Fecal Coli	LM014501	SD	Lake	Low	TMDL Approved on 9/30/2003
4a	Sheridan W.A.	Aquatic Life	pH	LM014501	SD	Lake	Low	TMDL Approved on 9/30/2003
4a	Paradise Creek Near Waldo	Aquatic Life	Selenium	SC538	OB, RO, RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near Hays	Aquatic Life	Selenium	SC548	TH, RO, SD, GH, EL, TR	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near Russell	Aquatic Life	Selenium	SC011	RO, RS, EL	Watershed	Low	TMDL Approved on 11/15/2004
4a	Paradise Creek Near Waldo	Water Supply	Sulfate	SC538	OB, RO, RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near Hays	Water Supply	Sulfate	SC548	TH, RO, SD, GH, EL, TR	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near Russell	Water Supply	Sulfate	SC011	RO, RS, EL	Watershed	Low	TMDL Approved on 11/15/2004
4a	Wilson Lake	Water Supply	Sulfate	LM014001	RS	Lake	Low	TMDL Approved on 11/15/2004

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260010

Lower Saline

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Spillman Creek Near Lincoln	Water Supply	Arsenic	SC673	MC, LC	Watershed	Low	
5	Mulberry Creek Near Salina	Aquatic Life	Copper	SC640	SA, EW, MP	Watershed	Low	Last exceedence occurred in most current sample year:2009
5	Mulberry Creek Near Salina	Aquatic Life	Total Phosphorus	SC640	SA, EW, MP	Watershed	Low	median value: 0.222 > median flag value:0.201
5	Saline River Near New Cambria	Aquatic Life	Total Phosphorus	SC267	OT, LC, SA	Watershed	Low	
5	Spillman Creek Near Lincoln	Aquatic Life	Total Phosphorus	SC673	MC, LC	Watershed	Low	median value: 0.31 > median flag value:0.201
5	Saline River Near Beverly	Aquatic Life	Total Suspended Solids	SC513	LC	Watershed	Low	median value: 77 > median flag value:50
5	Saline River Near New Cambria	Aquatic Life	Total Suspended Solids	SC267	OT, LC, SA	Watershed	Low	median value: 101 > median flag value:50
5	Spillman Creek Near Lincoln	Aquatic Life	Total Suspended Solids	SC673	MC, LC	Watershed	Low	median value: 69 > median flag value:50
5	Wolf Creek Near Sylvan Grove	Aquatic Life	Total Suspended Solids	SC537	OB, RS	Watershed	Low	median value: 72.5 > median flag value:50
4a	Saline River Near Beverly	Water Supply	Chloride	SC513	LC	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near New Cambria	Water Supply	Chloride	SC267	OT, LC, SA	Watershed	Low	TMDL Approved on 11/15/2004
4a	Wolf Creek Near Sylvan Grove	Water Supply	Chloride	SC537	OB, RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Spillman Creek Near Lincoln	Aquatic Life	Dissolved Oxygen	SC673	MC, LC	Watershed	High	TMDL Approved on 8/7/2003

2010 303(d) List of All Impaired/Potentially Impaired Waters Smoky Hill- Saline Basin

10260010

Lower Saline

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Wolf Creek Near Sylvan Grove	Aquatic Life	Selenium	SC537	OB, RS	Watershed	Low	TMDL Approved on 11/15/2004
4a	Bullfoot Creek Near Lincoln	Water Supply	Sulfate	SC672	LC, EW	Watershed	Low	TMDL Approved on 11/15/2004
4a	Elkhorn Creek Near Lincoln	Water Supply	Sulfate	SC671	LC, EW	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near Beverly	Water Supply	Sulfate	SC513	LC	Watershed	Low	TMDL Approved on 11/15/2004
4a	Saline River Near New Cambria	Water Supply	Sulfate	SC267	OT, LC, SA	Watershed	Low	TMDL Approved on 11/15/2004
4a	Wolf Creek Near Sylvan Grove	Water Supply	Sulfate	SC537	OB, RS	Watershed	Low	TMDL Approved on 11/15/2004
3	Spillman Creek Near Lincoln	Aquatic Life	Atrazine	SC673	MC, LC	Watershed		Recent Trends indicate concern
3	Saline River Near New Cambria	Aquatic Life	Biology	SC267	OT, LC, SA	Watershed		Small sample size
3	Saline River Near New Cambria	Recreation	E. coli	SC267	OT, LC, SA	Watershed		Small sample size
3	Saline Co. SFL	Water Supply	Siltation	LM013701	SA	Lake		Small sample size

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11030001

Middle Arkansas-Lake McKinney

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Arkansas River At Coolidge	Water Supply	Gross Alpha	SC223	HM	Watershed	High	Bundled w/ uranium
5	Arkansas River At Coolidge	Water Supply	Fluoride	SC223	HM	Watershed	Medium	
5	Arkansas River Near Deerfield	Water Supply	Fluoride	SC598	KE, HM	Watershed	Medium	
5	Hamilton Co. SFL	Water Supply	Chloride	LM016101	HM	Lake	Low	
5	Hamilton W.A.	Water Supply	Chloride	LM016141	HM	Lake	Low	
5	Hamilton Co. SFL	Aquatic Life	Dissolved Oxygen	LM016101	HM	Lake	Low	
5	Hamilton Co. SFL	Water Supply	Siltation	LM016101	HM	Lake	Low	
5	Hamilton W.A.	Water Supply	Siltation	LM016141	HM	Lake	Low	
5	Hamilton Co. SFL	Water Supply	Sulfate	LM016101	HM	Lake	Low	
5	Hamilton W.A.	Water Supply	Sulfate	LM016141	HM	Lake	Low	
5	Arkansas River Near Deerfield	Aquatic Life	Total Suspended Solids	SC598	KE, HM	Watershed	Low	
4a	Hamilton Co. SFL	Recreation	Aquatic Plants	LM016101	HM	Lake	Low	TMDL Approved on 9/11/2000
4a	Arkansas River At Coolidge	Water Supply	Boron	SC223	HM	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Deerfield	Water Supply	Boron	SC598	KE, HM	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Hamilton W.A.	Aquatic Life	Dissolved Oxygen	LM016141	HM	Lake	Low	TMDL Approved on 9/11/2000
4a	Hamilton Co. SFL	Aquatic Life	Eutrophication	LM016101	HM	Lake	Low	TMDL Approved on 9/11/2000
4a	Hamilton W.A.	Aquatic Life	Eutrophication	LM016141	HM	Lake	Low	TMDL Approved on 9/11/2000
4a	Arkansas River At Coolidge	Aquatic Life	Selenium	SC223	HM	Watershed	High	TMDL Approved on 2/28/2008

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11030001

Middle Arkansas-Lake McKinney

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Arkansas River Near Deerfield	Aquatic Life	Selenium	SC598	KE, HM	Watershed	High	TMDL Approved on 2/28/2008
4a	Arkansas River At Coolidge	Water Supply	Sulfate	SC223	HM	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Deerfield	Water Supply	Sulfate	SC598	KE, HM	Watershed	Medium	TMDL Approved on 9/11/2000
3	Beymer Lake	Water Supply	Fluoride	LM071001	JO	Lake		Small sample size, sampled in 1989 and 2005
3	Beymer Lake	Aquatic Life	Selenium	LM071001	JO	Lake		Small sample size, Sampled in 1989 and 2005

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11030003

Arkansas-Dodge City

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Lake Charles	Aquatic Life	Eutrophication	LM071101	FO	Lake	Low	
5	Arkansas River At Pierceville	Aquatic Life	Total Phosphorus	SC286	FI, KE	Watershed	Low	median value: 0.365 > median flag value:0.201
5	Arkansas River At Pierceville	Aquatic Life	Total Suspended Solids	SC286	FI, KE	Watershed	Low	median value: 364 > median flag value:50
4a	Arkansas River At Pierceville	Water Supply	Boron	SC286	FI, KE	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River At Pierceville	Recreation	Fecal Coli	SC286	FI, KE	Watershed	High	TMDL Approved on 8/9/2000
4a	Arkansas River At Pierceville	Aquatic Life	pH	SC286	FI, KE	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River At Pierceville	Aquatic Life	Selenium	SC286	FI, KE	Watershed	High	TMDL Approved on 2/28/2008
4a	Arkansas River At Pierceville	Water Supply	Sulfate	SC286	FI, KE	Watershed	Medium	TMDL Approved on 9/11/2000

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11030004

Arkansas-Pickerel

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Arkansas River Near Dundee	Aquatic Life	Selenium	SC584	PN, ED, FO	Watershed	Medium	
5	Arkansas River Near Ford	Aquatic Life	Selenium	SC594	GY, FO, HS	Watershed	Medium	
5	Arkansas River Near Great Bend	Aquatic Life	Selenium	SC284	BT, SF	Watershed	Medium	
5	Arkansas River Near Kinsley	Aquatic Life	Selenium	SC587	ED, FO	Watershed	Medium	
5	Mulberry Creek Near Ford	Aquatic Life	Dissolved Oxygen	SC700	FO	Watershed	Low	
5	Arkansas River Near Ford	Water Supply	Fluoride	SC594	GY, FO, HS	Watershed	Low	
5	Arkansas River Near Dundee	Aquatic Life	Total Phosphorus	SC584	PN, ED, FO	Watershed	Low	
5	Arkansas River Near Ford	Aquatic Life	Total Phosphorus	SC594	GY, FO, HS	Watershed	Low	median value: 0.257 > median flag value:0.201
5	Arkansas River Near Great Bend	Aquatic Life	Total Phosphorus	SC284	BT, SF	Watershed	Low	median value: 0.2325 > median flag value:0.201
5	Arkansas River Near Ford	Aquatic Life	Total Suspended Solids	SC594	GY, FO, HS	Watershed	Low	
5	Mulberry Creek Near Ford	Aquatic Life	Total Suspended Solids	SC700	FO	Watershed	Low	median value: 110 > median flag value:50
4a	Arkansas River Near Great Bend	Aquatic Life	Biology	SC284	BT, SF	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Dundee	Recreation	Fecal Coli	SC584	PN, ED, FO	Watershed	High	TMDL Approved on 8/9/2000
4a	Arkansas River Near Ford	Recreation	Fecal Coli	SC594	GY, FO, HS	Watershed	High	TMDL Approved on 8/9/2000
4a	Arkansas River Near Great Bend	Recreation	Fecal Coli	SC284	BT, SF	Watershed	High	TMDL Approved on 8/9/2000
4a	Arkansas River Near Kinsley	Recreation	Fecal Coli	SC587	ED, FO	Watershed	High	TMDL Approved on 8/9/2000

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11030004

Arkansas-Pickerel

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Arkansas River Near Kinsley	Water Supply	Fluoride	SC587	ED, FO	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Dundee	Water Supply	Sulfate	SC584	PN, ED, FO	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Ford	Water Supply	Sulfate	SC594	GY, FO, HS	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Great Bend	Water Supply	Sulfate	SC284	BT, SF	Watershed	Medium	TMDL Approved on 9/11/2000
4a	Arkansas River Near Kinsley	Water Supply	Sulfate	SC587	ED, FO	Watershed	Medium	TMDL Approved on 9/11/2000
3	Mulberry Creek Near Ford	Aquatic Life	Lead	SC700	FO	Watershed		

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11030005

Pawnee

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Pawnee River Near Burdett	Aquatic Life	Atrazine	SC586	NX, FI, HG	Watershed	Low	
5	Pawnee River Near Larned	Aquatic Life	Atrazine	SC585	PN	Watershed	Low	Last exceedence occurred in most current sample year:2009
5	Concannon SFL	Water Supply	Boron	LM053601	FI	Lake	Low	
5	Pawnee River Near Burdett	Aquatic Life	Copper	SC586	NX, FI, HG	Watershed	Low	
5	Pawnee River Near Larned	Aquatic Life	Copper	SC585	PN	Watershed	Low	
5	Pawnee River Near Burdett	Aquatic Life	Dissolved Oxygen	SC586	NX, FI, HG	Watershed	Low	
5	Pawnee River Near Larned	Aquatic Life	Dissolved Oxygen	SC585	PN	Watershed	Low	
5	Concannon SFL	Aquatic Life	Eutrophication	LM053601	FI	Lake	Low	
5	Concannon SFL	Water Supply	Fluoride	LM053601	FI	Lake	Low	
5	Pawnee River Near Burdett	Aquatic Life	Lead	SC586	NX, FI, HG	Watershed	Low	
5	Pawnee River Near Larned	Aquatic Life	Lead	SC585	PN	Watershed	Low	
5	Concannon SFL	Water Supply	Sulfate	LM053601	FI	Lake	Low	
5	Pawnee River Near Burdett	Aquatic Life	Total Phosphorus	SC586	NX, FI, HG	Watershed	Low	median value: 0.471 > median flag value:0.201
5	Pawnee River Near Larned	Aquatic Life	Total Phosphorus	SC585	PN	Watershed	Low	median value: 0.536 > median flag value:0.201
5	Pawnee River Near Burdett	Aquatic Life	Total Suspended Solids	SC586	NX, FI, HG	Watershed	Low	median value: 64 > median flag value:50
4a	Pawnee River Near Burdett	Recreation	Fecal Coli	SC586	NX, FI, HG	Watershed	High	TMDL Approved on 8/9/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Upper Arkansas Basin

11030005

Pawnee

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Pawnee River Near Larned	Recreation	Fecal Coli	SC585	PN	Watershed	High	TMDL Approved on 8/9/2000
3	Concannon SFL	Water Supply	Arsenic	LM053601	FI	Lake		Small sample size, exceeded in 2002, last sampled in 2002

11030006

Buckner

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Hain SFL	Aquatic Life	Eutrophication	LM070901	FO	Lake	Low	
5	Jetmore Lake	Aquatic Life	Eutrophication	LM073901	HG	Lake	Low	
4a	Jetmore Lake	Recreation	Aquatic Plants	LM073901	HG	Lake	Low	TMDL Approved on 8/9/2000
4a	Ford Co. Lake	Aquatic Life	Dissolved Oxygen	LM070801	FO	Lake	High	TMDL Approved on 9/11/2000
4a	Ford Co. Lake	Aquatic Life	Eutrophication	LM070801	FO	Lake	High	TMDL Approved on 9/11/2000
4a	Ford Co. Lake	Aquatic Life	pH	LM070801	FO	Lake	High	TMDL Approved on 9/11/2000
3	Boy Scout Lake	Aquatic Life	Eutrophication	LM070601	HG	Lake		Small sample size, Chla last sampled in 1989

11030007

Upper Walnut Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Walnut Creek At Ness City	Aquatic Life	Selenium	SC595	SC, LE, NS	Watershed	Low	
4a	Walnut Creek At Ness City	Water Supply	Sulfate	SC595	SC, LE, NS	Watershed	Low	TMDL Approved on 9/11/2000

2010 303(d) List of All Impaired/Potentially Impaired Waters Upper Arkansas Basin

11030008

Lower Walnut Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Walnut Creek Near Alexander	Aquatic Life	Dissolved Oxygen	SC596	LE, NS	Watershed	High	
5	Walnut Creek Near Heizer	Aquatic Life	Dissolved Oxygen	SC597	RH, BT	Watershed	High	
5	Walnut Creek Near Alexander	Aquatic Life	Selenium	SC596	LE, NS	Watershed	High	
5	Walnut Creek Near Heizer	Aquatic Life	Selenium	SC597	RH, BT	Watershed	High	
5	Walnut Creek Near Heizer	Water Supply	Nitrate	SC597	RH, BT	Watershed	Medium	
5	Goodman SFL	Aquatic Life	Eutrophication	LM052401	NS	Lake	Low	
5	Memorial Park Lake	Aquatic Life	Eutrophication	LM071501	BT	Lake		Sampled in 2009 with excessive nutrients and Chla
5	Goodman SFL	Water Supply	Sulfate	LM052401	NS	Lake	Low	
5	Walnut Creek Near Heizer	Aquatic Life	Total Phosphorus	SC597	RH, BT	Watershed	Low	median value: 0.306 > median flag value:0.201
5	Walnut Creek Near Alexander	Aquatic Life	Total Suspended Solids	SC596	LE, NS	Watershed	Low	median value: 52 > median flag value:50
5	Walnut Creek Near Heizer	Aquatic Life	Total Suspended Solids	SC597	RH, BT	Watershed	Low	median value: 57 > median flag value:50
4a	Stone Lake	Aquatic Life	Eutrophication	LM074001	BT	Lake	Low	TMDL Approved on 9/11/2000
4a	Walnut Creek Near Alexander	Water Supply	Sulfate	SC596	LE, NS	Watershed	Low	TMDL Approved on 9/11/2000
4a	Walnut Creek Near Heizer	Water Supply	Sulfate	SC597	RH, BT	Watershed	Low	TMDL Approved on 9/11/2000

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11030008

Lower Walnut Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Goodman SFL	Aquatic Life	Selenium	LM052401	NS	Lake		Small sample size, one year exceeded in 2002, last sampled in 2006 and that year was compliant

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10250001

Arikaree

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Arikaree River Near Haigler, Nebraska	Water Supply	Arsenic	SC226	CN	Watershed	Low	
5	Arikaree River Near Haigler, Nebraska	Aquatic Life	Dissolved Oxygen	SC226	CN	Watershed	Low	
4a	Arikaree River Near Haigler, Nebraska	Water Supply	Fluoride	SC226	CN	Watershed	Low	TMDL Approved on 9/20/2006
4a	Arikaree River Near Haigler, Nebraska	Aquatic Life	Selenium	SC226	CN	Watershed	Low	TMDL Approved on 9/20/2006
4a	Arikaree River Near Haigler, Nebraska	Water Supply	Sulfate	SC226	CN	Watershed	Low	Use designation changes not yet approved by EPA
3	Arikaree River Near Haigler, Nebraska	Recreation	E. coli	SC226	CN	Watershed		Awaiting E. coli sampling

10250003

South Fork Republican

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	South Fork Republican River Near Benkelman, Nebraska	Water Supply	Fluoride	SC227	CN	Watershed	Low	TMDL Approved on 8/7/2003
4a	South Fork Republican River Near St. Francis	Water Supply	Fluoride	SC225	CN	Watershed	Low	TMDL Approved on 8/7/2003
3	South Fork Republican River Near St. Francis	Aquatic Life	Biology	SC225	CN	Watershed		Small sample size, SB379
3	Saint Francis W.A.	Aquatic Life	Copper	LM071401	CN	Lake		Small sample size
3	Saint Francis W.A.	Aquatic Life	Eutrophication	LM071401	CN	Lake		Small sample size

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10250011

Lower Sappa

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Sappa Creek Near Beaver City, Nebraska	Water Supply	Arsenic	SC229	RA, DC, NT, SH, TH	Watershed	Low	
5	Sappa Creek Near Beaver City, Nebraska	Aquatic Life	Total Phosphorus	SC229	RA, DC, NT, SH, TH	Watershed	Low	median value: 0.554 > median flag value:0.201

10250012

South Fork Beaver

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
3	Atwood Township Lake	Aquatic Life	Eutrophication	LM071201	RA	Lake		Small sample size
3	Atwood Township Lake	Water Supply	Fluoride	LM071201	RA	Lake		Small sample size
3	Atwood Township Lake	Water Supply	Sulfate	LM071201	RA	Lake		Small sample size

10250014

Beaver Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Beaver Creek At Cedar Bluffs	Aquatic Life	Total Phosphorus	SC228	CN, RA, DC, SH	Watershed	Low	
4a	Beaver Creek At Cedar Bluffs	Aquatic Life	Dissolved Oxygen	SC228	CN, RA, DC, SH	Watershed	Low	TMDL Approved on 9/20/2006
4a	Beaver Creek At Cedar Bluffs	Water Supply	Fluoride	SC228	CN, RA, DC, SH	Watershed	Low	TMDL Approved on 9/20/2006

2010 303(d) List of All Impaired/Potentially Impaired Waters Upper Republican Basin

10250015

Prairie Dog Creek

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Prairie Dog Creek Near Dellvale	Water Supply	Arsenic	SC549	DC, TH	Watershed	Low	Last exceedence occurred in most current sample year:2009
5	Prairie Dog Creek Near Woodruff	Water Supply	Arsenic	SC230	PL, NT	Watershed	Low	
5	Prairie Dog Creek Near Dellvale	Aquatic Life	Dissolved Oxygen	SC549	DC, TH	Watershed	Low	
5	Prairie Dog Creek Near Dellvale	Aquatic Life	Total Phosphorus	SC549	DC, TH	Watershed	Low	median value: 0.323 > median flag value:0.201
5	Prairie Dog Creek Near Woodruff	Aquatic Life	Total Phosphorus	SC230	PL, NT	Watershed	Low	median value: 0.7515 > median flag value:0.201
4a	Norton Lake (Sebelius Lake)	Aquatic Life	Dissolved Oxygen	LM010001	NT	Lake	Low	TMDL Approved on 8/7/2003
4a	Prairie Dog Creek Near Woodruff	Aquatic Life	Dissolved Oxygen	SC230	PL, NT	Watershed	High	TMDL Approved on 8/7/2003
4a	Colby City Lake	Aquatic Life	Eutrophication	LM071301	TH	Lake	Low	TMDL Approved on 8/7/2003
4a	Norton Lake (Sebelius Lake)	Aquatic Life	Eutrophication	LM010001	NT	Lake	Low	TMDL Approved on 8/7/2003
4a	Norton Lake (Sebelius Lake)	Aquatic Life	pH	LM010001	NT	Lake	Low	TMDL Approved on 8/7/2003
3	Colby City Lake	Aquatic Life	Lead	LM071301	TH	Lake		Small sample size

2010 303(d) List of All Impaired/Potentially Impaired Waters Verdigris Basin

11070101

Upper Verdigris

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Verdigris River Near Virgil	Recreation	E. coli	SC289	LY, CS, GW	Watershed	Low	GeoMean Exceedence
5	Woodson W.A.	Water Supply	Siltation	LM011841	WO	Lake	Low	
4a	Chetopa Creek Near Neodesha	Aquatic Life	Dissolved Oxygen	SC696	WL, NO	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Toronto Lake	Aquatic Life	Dissolved Oxygen	LM024001	GW, WO	Lake	High	TMDL Approved on 9/30/2009
4a	Wilson Co. SFL	Aquatic Life	Dissolved Oxygen	LM015101	WL	Lake	Medium	TMDL Approved on 9/30/2002
4a	Woodson W.A.	Aquatic Life	Dissolved Oxygen	LM011841	WO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Eureka Lake	Aquatic Life	Eutrophication	LM040201	GW	Lake	Medium	TMDL Approved on 9/30/2009
4a	Toronto Lake	Aquatic Life	Eutrophication	LM024001	GW, WO	Lake	High	TMDL Approved on 9/30/2009
4a	Wilson Co. SFL	Aquatic Life	Eutrophication	LM015101	WL	Lake	Medium	TMDL Approved on 9/30/2002
4a	Woodson W.A.	Aquatic Life	Eutrophication	LM011841	WO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Chetopa Creek Near Neodesha	Recreation	Fecal Coli	SC696	WL, NO	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Woodson W.A.	Recreation	Fecal Coli	LM011841	WO	Lake	Medium	TMDL Approved on 9/30/2002
4a	Eureka Lake	Water Supply	Siltation	LM040201	GW	Lake	Medium	TMDL Approved on 9/30/2009
4a	Toronto Lake	Water Supply	Siltation	LM024001	GW, WO	Lake	High	TMDL Approved on 9/30/2009

2010 303(d) List of All Impaired/Potentially Impaired Waters Verdigris Basin

11070102

Fall River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Fall River Lake	Aquatic Life	Dissolved Oxygen	LM023001	GW	Lake	High	TMDL Approved on 9/30/2009
4a	Fall River Lake	Aquatic Life	Eutrophication	LM023001	GW	Lake	High	TMDL Approved on 9/30/2009
4a	Fall River Near Climax	Recreation	Fecal Coli	SC575	GW, BU	Watershed	High	TMDL Approved on 9/30/2002
4a	Fall River Lake	Water Supply	Siltation	LM023001	GW	Lake	High	TMDL Approved on 9/30/2009

2010 303(d) List of All Impaired/Potentially Impaired Waters Verdigris Basin

11070103

Middle Verdigris

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Big Hill Creek Near Avian	Aquatic Life	Copper	SC607	MG, LB	Watershed	Low	
5	Onion Creek Near Coffeyville	Aquatic Life	Copper	SC608	MG	Watershed	Low	
5	Pumpkin Creek Near Coffeyville	Aquatic Life	Copper	SC606	LB	Watershed	Low	
5	Big Hill Creek Near Avian	Aquatic Life	Lead	SC607	MG, LB	Watershed	Low	Last exceedence occurred in most current sample year:2009
5	Onion Creek Near Coffeyville	Aquatic Life	Zinc	SC608	MG	Watershed	Low	
4a	Verdigris River Near Coffeyville	Aquatic Life	Biology	SC215	MG	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Verdigris River Near Independence	Aquatic Life	Biology	SC563	MG	Watershed	Medium	TMDL Approved on 9/30/2002, SB215
4a	Big Hill Creek Near Avian	Aquatic Life	Dissolved Oxygen	SC607	MG, LB	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Montgomery Co. SFL	Aquatic Life	Dissolved Oxygen	LM010701	MG	Lake	Medium	TMDL Approved on 9/30/2002
4a	Onion Creek Near Coffeyville	Aquatic Life	Dissolved Oxygen	SC608	MG	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Pumpkin Creek Near Coffeyville	Aquatic Life	Dissolved Oxygen	SC606	LB	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Big Hill Lake	Aquatic Life	Eutrophication	LM031001	NO, LB	Lake	High	TMDL Approved on 9/30/2009
4a	La Claire Lake	Aquatic Life	Eutrophication	LM072901	MG	Lake	Low	TMDL Approved on 9/30/2002
4a	Lake Tanko (Cherryvale City Lake)	Aquatic Life	Eutrophication	LM071601	MG	Lake	Low	TMDL Approved on 9/30/2002
4a	Montgomery Co. SFL	Aquatic Life	Eutrophication	LM010701	MG	Lake	Medium	TMDL Approved on 9/30/2002

2010 303(d) List of All Impaired/Potentially Impaired Waters Verdigris Basin

11070103

Middle Verdigris

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Big Hill Creek Near Avian	Recreation	Fecal Coli	SC607	MG, LB	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Verdigris River Near Coffeyville	Recreation	Fecal Coli	SC215	MG	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Verdigris River Near Independence	Recreation	Fecal Coli	SC563	MG	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Montgomery Co. SFL	Aquatic Life	pH	LM010701	MG	Lake	Medium	TMDL Approved on 9/30/2002
3	Drum Creek	Aquatic Life	Ammonia	NPDES45951	MG	Facility		NPDES Permit-Lagoon Study Pending
3	Lower Verdigris River	Aquatic Life	Ammonia	NPDES50733	MG	Facility		Evaluate for 2012 303(d) list
3	Verdigris River below Independence	Aquatic Life	Ammonia	NPDES42625	MG	Facility		Evaluate for 2012 303(d) list
3	Drum Creek	Recreation	Fecal Coli	NPDES45951	MG	Facility		NPDES Permit-Lagoon Study Pending
3	Lower Verdigris River	Recreation	Fecal Coli	NPDES50733	MG	Facility		Evaluate for 2012 303(d) list

2010 303(d) List of All Impaired/Potentially Impaired Waters Verdigris Basin

11070104

Elk River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Polk Daniels Lake (Elk Co. SFL)	Aquatic Life	Eutrophication	LM012701	EK	Lake	Low	
4a	Elk River Near Howard	Aquatic Life	Dissolved Oxygen	SC693	EK, MG	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Elk City Lake	Aquatic Life	Eutrophication	LM025001	EK, MG, CQ	Lake	Medium	TMDL Approved on 9/30/2009
4a	Elk River Near Howard	Recreation	Fecal Coli	SC693	EK, MG	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Elk City Lake	Water Supply	Siltation	LM025001	EK, MG, CQ	Lake	Medium	TMDL Approved on 9/30/2009

11070106

Caney River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Middle Caney Creek Near Sedan	Aquatic Life	Dissolved Oxygen	SC694	CQ	Watershed	Low	
3	Little Caney River	Recreation	Fecal Coli	NPDES27481	MG	Facility		Evaluate for 2012 303(d) list

2010 303(d) List of All Impaired/Potentially Impaired Waters Walnut Basin

11030017

Upper Walnut River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Whitewater River At Towanda	Aquatic Life	Atrazine	SC038	HV, BU, SG	Watershed	Low	Recent Trends Do Not Indicate Concern
5	Augusta City Lake	Aquatic Life	Eutrophication	LM040001	BU	Lake	Low	
5	Augusta Santa Fe Lake	Aquatic Life	Lead	LM041601	BU	Lake	Low	
5	Walnut River Near El Dorado	Aquatic Life	Total Phosphorus	SC279	BU	Watershed	Low	median value: 0.2615 > median flag value:0.201
5	Whitewater River At Towanda	Aquatic Life	Total Phosphorus	SC038	HV, BU, SG	Watershed	Low	median value: 0.224 > median flag value:0.201
4a	Augusta Santa Fe Lake	Aquatic Life	Dissolved Oxygen	LM041601	BU	Lake	Medium	TMDL Approved on 9/30/2002
4a	Augusta Santa Fe Lake	Aquatic Life	Eutrophication	LM041601	BU	Lake	Medium	TMDL Approved on 9/30/2002
4a	El Dorado Lake	Aquatic Life	Eutrophication	LM033001	BU	Lake	High	TMDL Approved on 9/30/2002
4a	Harvey Co. East Lake	Aquatic Life	Eutrophication	LM052001	HV	Lake	Medium	TMDL Approved on 9/30/2002
4a	Walnut River Near El Dorado	Recreation	Fecal Coli	SC279	BU	Watershed	High	TMDL Approved on 9/30/2002
4a	Whitewater River At Towanda	Recreation	Fecal Coli	SC038	HV, BU, SG	Watershed	High	TMDL Approved on 9/30/2002
4a	Augusta Santa Fe Lake	Water Supply	Siltation	LM041601	BU	Lake	Medium	TMDL Approved on 9/30/2002
4a	El Dorado Lake	Water Supply	Siltation	LM033001	BU	Lake	High	TMDL Approved on 9/30/2002
4a	Whitewater River At Towanda	Water Supply	Sulfate	SC038	HV, BU, SG	Watershed	Low	TMDL Approved on 9/30/2002

2010 303(d) List of All Impaired/Potentially Impaired Waters Walnut Basin

11030018

Lower Walnut River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
5	Little Walnut River Near Douglas	Aquatic Life	Copper	SC655	BU	Watershed	Low	
5	Timber Creek Near Winfield	Aquatic Life	Lead	SC653	CL	Watershed	Low	Last exceedence occurred in most current sample year:2007
5	Eight Mile Creek Near Douglas	Aquatic Life	Total Phosphorus	SC704	BU	Watershed	Low	median value: 0.265 > median flag value:0.201
5	Four Mile Creek Near Gordon	Aquatic Life	Total Phosphorus	SC744	BU, SG	Watershed	Low	median value: 0.2065 > median flag value:0.201
5	Walnut River At Gordon	Aquatic Life	Total Phosphorus	SC106	BU	Watershed	Low	median value: 0.2275 > median flag value:0.201
4a	Walnut River At Gordon	Aquatic Life	Biology	SC106	BU	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Walnut River Near Hackney	Aquatic Life	Biology	SC532	BU, CL	Watershed	Medium	TMDL Approved on 9/30/2002
4a	Butler Co. SFL	Aquatic Life	Eutrophication	LM049401	BU	Lake	Medium	TMDL Approved on 9/30/2002
4a	Winfield City Lake	Aquatic Life	Eutrophication	LM050801	CL	Lake	High	TMDL Approved on 9/30/2009
4a	Winfield Park Lagoon	Aquatic Life	Eutrophication	LM072301	CL	Lake	Low	TMDL Approved on 9/30/2002
4a	Little Walnut River Near Douglas	Recreation	Fecal Coli	SC655	BU	Watershed	High	TMDL Approved on 9/30/2002
4a	Rock Creek Near Rock	Recreation	Fecal Coli	SC654	BU, CL	Watershed	High	TMDL Approved on 9/30/2002
4a	Eight Mile Creek Near Douglas	Water Supply	Sulfate	SC704	BU	Watershed	Low	TMDL Approved on 9/30/2002

2010 303(d) List of All Impaired/Potentially Impaired Waters Walnut Basin

11030018

Lower Walnut River

Cat.	Stream/Lake	Impaired Use	Impairment	Station	Counties	Body Type	Priority	Comment
4a	Four Mile Creek Near Gordon	Water Supply	Sulfate	SC744	BU, SG	Watershed	Low	TMDL Approved on 9/30/2002
4a	Walnut River At Gordon	Water Supply	Sulfate	SC106	BU	Watershed	Low	TMDL Approved on 9/30/2002
4a	Walnut River Near Hackney	Water Supply	Sulfate	SC532	BU, CL	Watershed	Low	TMDL Approved on 9/30/2002
3	Timber Creek Near Winfield	Aquatic Life	Copper	SC653	CL	Watershed		
3	Timber Creek Near Winfield	Recreation	E. coli	SC653	CL	Watershed		Small sample size

Appendix Five

STATE AND FEDERAL NONPOINT SOURCE POLLUTION RELATED PROGRAMS AND AUTHORITIES		
Agency	Program	Authorities
State Agencies		
Kansas Department of Health and Environment	<ul style="list-style-type: none"> • Water Quality Monitoring and Assessment • Watershed Planning (TMDL Program) • Watershed Management (NPS Program) • Water Quality Certification • Livestock Waste Management • Water Pollution Control Program (Municipal and Industrial) • Public Water Supply Program • Water Wells, Underground Injection Control and Underground Hydrocarbon and Natural Gas Storage Programs • Environmental Remediation – State Cooperative Program • State Water Plan Contamination/Remediation Program • Site Assessment Program • State Brownfields Program • Petroleum Storage Tank Program • Natural Resource Damage and Assessment Program • Spill Program 	<ul style="list-style-type: none"> • K.S.A. 65-156 <i>et seq</i> • K.S.A. 75-5657 • Federal Clean Water Act, Sections 101(a)(7), 319 and 401 • K.S.A. 65-171 <i>et seq</i> • K.S.A. 65-3453 <i>et seq</i> • K.S.A. 65-34 and 161 <i>et seq</i> • K.S.A. 82a-927 <i>et seq</i> • K.S.A. 82a-1201 <i>et seq</i> • K.S.A. 55-1,117 • Federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) • Federal Small Business Liability Relief & Brownfields Revitalization Act • K.S.A. 75-5672, K.S.A. 65-161 and K.S.A. 65-171a,j,u
Kansas Department of Agriculture	<ul style="list-style-type: none"> • Fertilizer Program • Pesticide Program • Water Structures Program • Water Appropriations Program - Minimum Desirable Streamflows 	<ul style="list-style-type: none"> • K.S.A. 2-1201 <i>et seq</i> • K.S.A. 2-2438 <i>et seq</i> • K.S.A. 2-2201 <i>et seq</i> • K.S.A. 82a-301 <i>et seq</i> • K.S.A. 12-766; 24-105; 24-126 • K.S.A. 82a-703a, b and c • Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
Kansas Department of Wildlife and Parks	<ul style="list-style-type: none"> • Pollution and Fish Kill Investigations • Conservation Easements (Wetlands & Riparian Areas) • Environmental Services • Wildlife Habitat Improvement Program (WHIP) • Stream Survey and Assessment Program 	<ul style="list-style-type: none"> • K.S.A. 32-702, 32-703, 32-801 • K.S.A. 32-807, K.S.A. 58-3810 <i>et seq</i> • K.S.A. 32-107, 32-501
State Conservation Commission	<ul style="list-style-type: none"> • Water Resources Cost-Share Program • Non-Point Source Pollution Control Program • State Assistance to Watershed Dam Construction • Riparian & Wetland Protection Program • Water Quality Buffer Initiative 	<ul style="list-style-type: none"> • K.S.A. 2-1915 as amended • K.S.A. 2-1902 • K.S.A. 2-1904
Kansas Water Office	<ul style="list-style-type: none"> • State Water Planning • Basic Data Collection and Research Coordination • Public Information, Education and Outreach 	<ul style="list-style-type: none"> • K.S.A. 82a-901 <i>et seq</i> • K.S.A. 74-2608

Appendix Five

Kansas State University Research and Extension	<ul style="list-style-type: none"> • Water Quality Programs • Watershed Specialist Program • WRAPS Technical Team • Water LINK, Citizen Science, Healthy Ecosystems-Healthy Communities, E.A.R.T.H. educational programs • Rangeland and Natural Area Services • Kansas Environmental Leadership Program • Kansas Water Resources Research Institute 	<ul style="list-style-type: none"> • Federal Hatch, Smith Lever and subsequent acts • K.S.A. 2-608 as amended
Kansas Forest Service	<ul style="list-style-type: none"> • Forest Stewardship Program • Riparian Forestry Program • Conservation Tree Planting Program • Landowner and Environmental Education • Community Forestry Program 	<ul style="list-style-type: none"> • K.S.A. 76-452d
Kansas Biological Survey	<ul style="list-style-type: none"> • Applied Science & Technology for Reservoir Assessment • Natural Heritage Inventory • Applied Remote Sensing Program • Central Plains Center for BioAssessment • Field Station and Ecological Resources 	<ul style="list-style-type: none"> • K.S.A. 76-338 • K.S.A. 74-6601 <i>et seq</i>
Kansas Geological Survey	<ul style="list-style-type: none"> • Groundwater Contamination Analysis 	<ul style="list-style-type: none"> • K.S.A. 76-322
Kansas Corporation Commission	<ul style="list-style-type: none"> • Plugging and Temporary Abandoned Wells • Environmental Projects and Surface Ponds • Underground Injection Control • Abandoned Well Plugging and Site Remediation Fund 	<ul style="list-style-type: none"> • K.S.A 55-152 <i>et seq</i> • K.S.A. 55-179 <i>et seq</i>
Federal Agencies		
US Environmental Protection Agency	<ul style="list-style-type: none"> • Water, Wetlands and Pesticides Divisions • Toxics and Pesticides Branch • Watershed Planning and Implementation Branch • Water Quality Management Branch • Drinking Water Management Branch 	<ul style="list-style-type: none"> • Federal Clean Water Act • Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) • Federal Safe Drinking Water Act
US Department of Agriculture, Natural Resources Conservation Service	<ul style="list-style-type: none"> • Conservation Compliance • Conservation Stewardship Program • Environmental Water Quality Incentives Program • Farm and Ranch Lands Protection Program • Plant Material Program • Resource Conservation and Development Program • Wetland Mitigation Banking • Wetland Reserve Program • Wildlife Habitat Incentives Program • Conservation Technical Assistance • Technical Resources – National Resources Inventory • Kansas Grazing Land Coalition 	<ul style="list-style-type: none"> • 1985 Food Security Act (FSA) • 1990 Food Agriculture Conservation and Trade Act • 1996 Federal Agriculture Improvement and Reform Act • Water Resources (FAIRA) Development Act 1990, Section 307(d) • 1996 FAIRA reauthorized under P.L. 104-127, 107-171 and 110-234 • P.L. 74-46, 87-703 and 97-98 as amended • 16 U.S.C. 3837 <i>et seq</i> and amended under P.L. 110-246

APPENDIX FOUR

Kansas Nonpoint Source Pollution Management Plan

Kansas Nonpoint Pollutant Source Categories

10	<u>Agriculture</u>		55.1: Petroleum Activities - Drilling Waste Storage and Handling
	*10.1: Fertilizer & Nutrient Application		
	10.2: Pesticide Application		
	*10.21: Pesticide Application - Field Practices		55.2: Petroleum Activities - Disposal of Brines and Mineralized Waters
	10.22: Pesticide Application - Certified Applicators		55.3: Petroleum Activities - Abandoned Oil and Gas Wells
	*10.23: Pesticide Application - Non-certified Applicators		56: Mill Tailings
	10.3: Chemigation		57: Mine Tailings
	10.31: Chemigation - Source Control		58.1: Water Well Development - Licensed Contractors and Non-domestic, Individual
	*10.32: Chemigation - Application Procedures		*58.2: Water Well Development - Domestic, Individual
	*11: Non-irrigated Crop Production		<u>Land Disposal (Runoff/Leachate From Permitted Areas)</u>
	*11.1: Crop Production - Suspended Solids	60	61: Sludge
	*11.2: Crop Production - Nutrients		62: Wastewater
	*12: Irrigated Crop Production		63: Landfills
	*13: Specialty Crop Production (e.g. truck farming and orchards)		*64: Industrial Land Treatment
	*14: Pasture Land		65: On-site Wastewater Systems (septic tanks, etc.)
	*15: Range Land		66: Hazardous Waste
	16: Confined Livestock Operations		<u>Hydrologic/Habitat Modification</u>
	*17: Aquaculture	70	71: Channelization
	*18: Animal Holding/Management Areas		72: Dredging
	18.1 Livestock manure management		73: Dam Construction
	18.1.1 Composting		*74: Flow Regulation/Modification
	18.1.2 Storage		75: Bridge Construction
	18.1.3 Land Application		*76: Removal of Riparian Vegetation
	*19: Residences		77: Streambank Modification/De-stabilization
	*19.1: Farmstead		78: Land use conversion development
	*19.2: Rural Non-farm		<u>Other</u>
20	<u>Silviculture</u>		*81: Atmospheric Deposition
	*21: Harvesting, Reforestation, Residue Management	80	82: Storage Tanks - Petroleum or Regulated Substances
	*22: Forest Management		*82.3: Non-regulated Storage Tanks
	*23: Road Construction/Maintenance		*82.5: Abandoned/Buried Storage Tanks
30	<u>Construction</u>		*82.6: Abandoned Tank Piping
	*31: Highway/Road/Bridge		*83: Highway Maintenance and Runoff
	31.1: Highway/Road/Bridge - Federal Financed		84: Spills
	31.2: Highway/Road/Bridge - State Financed		*85: In-place Contaminants
	31.3: Highway/Road/Bridge - Locally Financed		*86: Natural
	*32: Land Development		<u>Transportation</u>
40	<u>Urban, Commercial, Industrial Areas</u>		*83.1: Highways
	40.1 Residential runoff		*83.11: Runoff
	40.2 Industrial site runoff	83	*83.12: Deicing
	40.3 Commercial area runoff		*83.13: Maintenance
	40.4 Open space runoff		83.14: Pesticide Use
	*41: Storm Sewers (source control)		*83.2: Rail Roads
	42: Sanitary Sewer Systems		*83.21: Runoff
	*43: Surface Runoff		*83.22: Maintenance
	44: Industrial Fluid Disposal		83.23: Pesticide Use
45	<u>Commercial and Institutional Sites</u>		<u>Utility Corridor</u>
	*45.01: Gasoline/Service Station		*87.1: Pipeline
	*45.02: School		*87.11: Pipeline Leaks
46	<u>Recreation Sites</u>	87	*87.2: Electrical
47	<u>Industrial Site</u>		*87.21: Construction
	47.011: Ag. Chemical - Fertilizer - Bulk Storage and Handling		87.22: Pesticide Application
	47.012: Ag. Chemical - Pesticide - Bulk Storage and Handling		88 <u>Abandoned Wells</u>
	47.01: Ag Chemical	88	88.1: Water Wells
	*47.02: Rail Yard		90 <u>Source unknown</u>
	47.03: Tank Farm		
	47.1: Industrial Park		
50	<u>Resource Extraction/Exploration/Development</u>		Source: Adapted from - US EPA. <u>Guidelines for the Preparation of the 1988 State Water Quality Assessment (305(b) Report)</u> , April 1, 1987, p; Revised December 2000.
	51: Surface Mining		
	51.1: Coal Mining		
	51.2: Rock Quarry		
	52: Subsurface Mining		
	53: Placer Mining		
	54: Dredge Mining		
	55: Petroleum Activities		

Recommended Best Management Practices for NPS Pollution Control

Following is a list of Best Management Practices for NPS pollution control. Other practices may be considered on a case by case basis by the funding agencies. Practices utilized for water quality projects that are specifically required by an NPDES permit are not considered an NPS pollution control practice.

The Kansas WRAPS Work Group has adopted the following criteria for funding BMPs for WRAPS projects:

1. The project will demonstrate a new or innovative water quality protection measure or enhance an established water quality protection measure.
 - a. Measures shall be implemented in a high priority area (identified in a watershed assessment, if available) and will help achieve water quality and pollutant load reduction goals for the watershed.
 - b. Measures shall be implemented in accordance with standards or procedures developed by a recognized authority with expertise in the subject matter (e.g. KSU Research and Extension, conservation district, professional engineer) and reviewed by KDHE.
 - c. An evaluation component shall be included to evaluate the effectiveness of the measure being implemented.
 - d. An information and education component shall be included to inform other stakeholders of the measure and its water quality benefits.
2. The project will demonstrate an established water quality protection practice
 - a. Practice shall be implemented in accordance with accepted standards and specifications of a state or federal agency when applicable. If no state or federal standard is available, other competent sources may be considered (e.g. urban BMP manuals).
 - b. Practice shall be implemented in a high priority area (identified in a watershed assessment, if available) and will help achieve water quality and pollutant load reduction goals for the watershed.
 - c. Other federal, state or local funding sources have been explored and are not available for implementation of the practice or other sources are being leveraged to implement the practice.
 - d. An information and education component will be included to inform other stakeholders of the practice and its water quality benefits. An assessment of the effectiveness of the outreach efforts utilized shall be included.

Table of NPS Best Management Practices

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Abandoned water well	351	x											x
Access Control	472	x											
Access Road	560	x	x	x	x	x		x					x
Ag Fuel Containment Facility	700	x	x										
Agrochemical Mixing Station, Portable	703	x	x										
Agrochemical Storage Facility	*	x	x										
Alternative Septic System	*												x
Alternative Water Sources	614	x											
Alum Treatment of Poultry Litter	*												
Amendments for the Treatment of Agricultural Waste	591	x											
Animal Mortality Facility	316	x											
Animal Trails and Walkways	575	x											
Anionic Polyacrylamide (PAM) Application	450	x		x									
Arazine Management Practices	*	x	x							x	x	x	
Baffle Boxes	*		x		x		x			x	x	x	
Barnyard Runoff Management	357	x											
Brush Control Management	314	x											
Channel Bank Vegetation	322	x	x		x					x	x	x	
Check Dam	10			x									
Cistern	*	x	x								x		x
Clearing and Snagging	326	x					x			x	x	x	
Closure of Waste Impoundments	360	x											
Composting Facility	317	x	x										
Comprehensive Nutrient Management Plan	*	x											
Concentrated non-confined Livestock	390	x											
Conservation Cover	327	x											
Conservation Crop Rotation	328	x											
Conservation Easements	*	x											
Conservation Tillage	329	x											
Constructed Wetland	658	x	x								x	x	
Contour Buffer Strips	322	x											
Contour Farming	330	x											

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Controlled Drainage	335	x											
Controlled Livestock Lounging Area	*	x											
Controlled Stream Access for Livestock Watering	*	x											
Cover Crop	340	x											
Critical Area Planting	342	x											
Critical Area Planting Reseeding	512r	x											
Cut Bank Stabilization	*	x	x		x					x	x	x	
Dam	356	x			x								
Dam - Diversion	402	x											
Dike	356	x	x		x		x			x	x	x	
Ditch Stabilization	581	x											
Diversion	362	x		x			x	x		x	x	x	
Drainage Water Management	*	x											
Erosion control blanket	*			x									
Erosion Control hay bales	*			x									
Erosion control logs or portable berms.	*			x									
Erosion control pollutant filter logs	*			x									
Erosion control silt fence	*			x									
Feed Management	595	x											
Fence	382	x											
Field Border	386	x											
Field Windbreak	390	x											
Filter Strip	393	x											
Filter Strip Reseeding	393r	x											
Fish Passage	395				x								
Floodwater Diversion	400	x	x		x	x	x	x	x	x	x	x	
Forage and Biomass Planting	512	x											
Forage - Harvest Management	511	x											
Forest - Direct Seeding	652								x				
Forest - Erosion Control	408								x				
Forest - Improved Harvest	654								x				
Forest - Land Management	904								x				
Forest- Purning	660								x				

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Forest Site Preparation	490								x				
Forest Stand Improvement	666								x				
Forest Trails and Landings	655								x				
Furrow Diking	715	x											
Grade Stabilization Structure	410	x			x								
Grassed Waterway or outlet	412	x			x								
Grasses/Legumes Rotation	411	x											
Grazing - Deferred	352	x											
Grazing Planned Systems	556	x											
Green Roof System	*		x								x		
Harvestable Riparian Buffer	*	x											
Heavy Use Area Protection	561	x											
Herbaceous Species/Noxious Weed Control	*	x	x										
High Residues Management	329a	x											
Hillside Ditch	423	x											
Home Sewage Treatment System Repair/Replacement	110		x				x						
Hydro Seeder	*			x									
Improved Water Application	*	x	x								x		
In-Lake Alum Treatment	*						x						
Infiltration Ditches	753	x	x								x		
Integrated Pest Management	595	x	x			x	x		x	x	x	x	x
Irrigation System-Surface & Subsurface	443	x											
Irrigation System-Tailwater Recovery	447	x											
Irrigation System, Trickle	441	x											
Irrigation Water Management	449	x											
Land Clearing	460	x	x	x	x	x	x	x	x	x	x	x	
Land Grading	*	x	x	x	x	x	x	x	x	x	x	x	
Land Reclamation	451							x					
Land Reclamation, Toxic Discharge Control	455	x	x					x					
Land Reconstruction, Abandoned Mined Land	543		x					x					

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Land Reconstruction, Brine Damaged Areas	*	x	x					x					
Land Smoothing	466			x				x					
Lined Waterway or Outlet	468	x											
Livestock Shade Structure	*	x											
Livestock Stream Crossing	*	x											
Livestock Use Area Protection	*	x											
Livestock Exclusion	472	x											
Livestock Waste Composting Facility	317	x	x										
Livestock Waste Management System	312	x	x										
Livstock Waste Storage Facility	313	x	x										
Livstock Waste Storage Pond	425	x	x										
Livestock Waste Treatment System Lagoon	359	x	x										
Long Term No-Till	329	x											
Manure Transfer	634	x	x										
Mole Drain	482	x											
Monitoring Well	353	x	x								x		
Mulching	454	x	x	x		x				x	x	x	
Native Plant Community Restoration & Management	767	x	x		x		x	x	x	x	x	x	
Natural Channel Restoration	*	x	x		x		x	x		x	x	x	
Nutrient Management	590	x											
Obstruction Removal	500	x											
Onsite Waterwater Treatment System Projects	110												x
Open Channel	582	x											
Organic Crop Production	14	x											
Pasture & Hayland Management	510	x											
Pasture & Hayland Planting	512	x											
Pasture & Hayland Planting Reseeding	512r	x											
Pest Management	595	x										x	
Pesticide Risk Reduction	596	x	x			x	x		x	x	x	x	x
Pipeline	516	x	x		x				x	x	x	x	x

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Planned Grazing System	*	x											
Pond Construction	538	x	x	x			x			x			
Pond Sealing or Lining	521	x	x	x			x			x			
Pond Sealing or Lining - Bentonite Sealant	521C	x	x	x			x			x			
Pond Sealing or Lining - Flexible Membrane	521A	x	x	x			x			x			
Pond Sealing Lining - Natural Clay	521D	x	x	x			x			x			
Pond Sealing or Lining - Soil dispersant	521B	x	x	x			x			x			
Pothole - Wetland for Wildlife	*	x											
Precision Land Forming	462	x	x	x	x								
Prescribed Grazing	528	x											
Private Drinking Water Supply Code/Ordinance	22												x
Pumped Well Drain	532	x			x		x						
Pumping Plant for Livestock Water Supply	553	x											
Raingarden/Biotention Basin	*		x								x		x
Range Planting	550	x											
Range Planting Reseeding	550r	x											
Rangeland Fertilization	721	x											
Record Keeping	748	x											
Recreation Area Improvement	562						x						
Recreation Land Grading & Shaping	566						x						
Recreation Trail & Walkway	568						x						
Regulating Water in Drainage Systems	554	x	x			x	x			x	x	x	
Recycling	15	x	x				x				x		x
Reduce In-Lake Total Phosphorus	*						x						
Residue Management	529	x											
Residue Management - Mulch Till	345	x											
Residue Management - No-Till & Strip Till	329a	x											
Residue Management - Ridge Till	346	x											

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Restoration & Management of Declining Habitats	643	x					x			x	x	x	
Restoration of Compacted Soils	775	x											
Rinse Water Control	746	x											
Riparian Buffers - Vegetative	*	x	x		x		x	x	x	x	x	x	x
Riparian Forest Buffer	391	x	x		x		x	x	x	x	x	x	x
Riparian Forest Improvement	666	x	x						x	x	x	x	
Riparian Herbaceous Cover	390												
Riparian Buffer Protection Code/Ordinance	*		x		x		x				x		
Riprap Shoreline	*	x					x						
Road Ditch Creation/Improvements	*									x			
Road/Landing Removal	*									x			
Rock Barrier	555	x											
Roof Runoff Management	558	x	x								x		x
Row Arrangement	557	x											
Runoff Filter	16												
Runoff Management System	570	x											
Salinity Sodic Soil Mgmt	610												
Salt or Deicer Storage Facility	*		x							x	x		
Secondary Fuel Containment	*	x	x					x		x	x		x
Sediment Basin	350	x	x	x						x	x		
Sediment Forebay	*		x	x						x	x		
Seeding (Revegetation)	42	x	x	x						x	x		
Shallow Water Management for Wildlife	656	x									x		
Silage Leachate Collection & Transfer	765	x											
Silvopasture Establishment	381	x							x				
Silvopasture Management	*	x							x				
Slope Roughening	726	x											
Soil Salinity Control		x											
Soil Salinity Management - Non-irrigated	571	x											
Soil Spreading	572	x									x		
Spring Development	574	x											x

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Stormwater Wet Detention / Chemical Treatment System	*		x								x		
Stream Channel Restoration (Dam Removal)	9	x			x						x		
Stream Channel Stabilization	584	x									x		
Stream Corridor Improvement	745	x									x		
Stream Crossing	578	x											
Stream Habitat Improvement & Management	395	x	x								x		
Streambank & Shoreline Protection	580	x	x		x						x		
Stream Protection Repair	580r	x	x		x						x		
Strip - Intercropping	758	x											
Stripcropping	585	x											
Subsurface Drain	606	x											
Surface Drainage - Field Ditch	607	x											
Surface Drainage - Main or Lateral	608	x											
Surface Roughening	609	x											
Surface Wetting	760	x											
Swimming Pool Backwash WW Reuse Dispersed Irrigation	*						x				x		x
Swimming Pool Backwash WW Reuse Dust Suppression	*						x				x		x
Tank/Trough	614	x											
Terrace	600	x											
Toxic Salt Reduction	610	x											
Trail Closure	41												
Transition to Organic Production	*	x											
Trash Dump Removal (and clean up)	18	x		x		x	x	x			x	x	x
Trash and Litter Control	17		x							x	x	x	
Tree/Shrub Establishment	612								x				
Tree/Shrub Preparation	490								x				
Two Stage Ditches	88												
Tree/Shrub Pruning	660	x							x				
Underground Outlet	620	x											

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Unpermitted Above Ground Storage Tank	700	x											x
Unpermitted Dump Site- Remediation	120	x	x	x		x	x	x	x	x	x	x	x
Upland Wildlife Habitat Management	645	x					x						
Urban Catch Basin	901		x										
Urban Catch Basin - Oil	902		x								x		
Urban Catch Basin - Sand	903		x								x		
Urban Concrete Grid	904		x								x		
Urban Exterior Detention Pond	905		x								x		
Urban Filtration Basin	906		x								x		
Urban Grassed Swale	907		x								x		
Urban Infiltration Basin	908		x								x		
Urban Infiltration Trench	908		x								x		
Urban Porous Pavement	910		x								x		
Urban Stormwater Wetland	911		x								x		
Urban Vegetated Filter	912		x								x		
Urban Wet Pond	913		x								x		
Use Exclusion	472												
Variable Application Rate Technology	70	x											
Vegetated Swales	66		x								x		
Vegetative Buffer Strips	741	x			x						x		
Vegetated Treatment Area	635	x											
Vertical Drain	630		x								x		
Vortech Units (urban stormwater)	*		x								x		
Waste Facility Cover	367	x											
Waste Field Storage Area	749	x											
Waste Management System	312	x											
Waste Storage Facility	313	x											
Waste Storage Pond	425	x											
Waste Transfer	634		x										
Waste Treatment Lagoon	359	x											
Waste Utilization	633	x											
Waste Water Irrigation	732	x	x								x		
Waste Water Treatment Strip	635	x											

Best Management Practice	NRCS code or other KDHE accepted standard (*)	Agriculture	Commercial, Institutional	Construction	Hydrologic modification	Land Disposal	Recreation	Resource Extraction /Exploration/ Development	Silviculture	Transportation	Urban/ Industrial areas	Utility Corridors	Rural Homes
Waste Water and Feedlot Runoff Control	784	x											
Water & Sediment Control Basin	638	x		x									
Waste Utilization	633	x											
Water Harvesting Catchment	636	x	x				x	x			x		x
9 Element Watershed Management Plan	*												
Water Conservation	19	x											
Water Control Structure	587	x	x								x		
Watering Facility	614	x											
Water spreading	640	x											
Water well	642	x	x								x		
Water Well Decommissioning	351	x											x
Water Well Plugging	700	x	x										x
Water Well Recommissioning (if inactive)	*	x											
Water Well Sanitary Seal	*	x											x
Wetland Acquisition-protection	6	x	x		x		x				x		
Wetland Creation	658	x	x		x		x				x		
Wetland Enhancement	659	x	x		x		x				x		
Wetland Restoration	657	x	x		x		x				x		
Wetland Wildlife Habitat Management	644	x	x		x		x				x		
Wind Barrier - Herbaceous	422A	x											
Windbreak/Shelterbelt Establishment	380	x											
Windbreak/Shelterbelt Renovation	650	x											
Woodland Pruning	763								x		x	x	x

Characteristics of Properly Functioning Watersheds

Function	Characteristics
Food, Fiber and Bio-fuel Production	
Cropland	<p>Cropland has conservation measures and practices intended to limit sheet and rill erosion to tolerable (T) rates</p> <p>Nutrient application occurs according to agronomic rate needs. Application levels do not exceed soil storage/plant uptake capacities based on soil test recommendations and risk analysis results.</p> <p>Soil nutrient levels do not exceed crop needs based on realistic yield goals and appropriate acidity (pH) levels are maintained.</p> <p>Chemical application rates are appropriate for the crop and occur in quantities that ensure minimal runoff to surface or ground waters.</p> <p>Application of all chemicals is minimized during in unsuitable climatic conditions.</p> <p>Pesticides are applied, stored, handled and disposed of so that residues in the soil do not adversely affect non-target plants and animals.</p>
Grazing Land	Grazing land is in good condition and stocking rates are optimal for maintenance of healthy cover to reduce runoff, soil erosion, and provide habitat. Grazing practices enhance wildlife populations and diversity of the ground cover.
Forest Land	Forest land is managed sustainably for all forest resources including soil and water, wildlife and fish habitat, recreation and aesthetics, and timber and other forest products.
Livestock Production	<p>All livestock production enterprises have “no significant pollution potential”</p> <p>All feedlots have a water pollution control permit appropriate to the capacity of the facility and in compliance with the terms and conditions of the permit.</p> <p>Livestock manure is used as a crop nutrient, is applied in amounts appropriate for the site and crop.</p> <p>Grazing livestock enterprises following a grazing management plan that protects waters quality and assures sustainable forage.</p> <p>Livestock use of riparian areas assures no damage to riparian area resources and functions.</p>
Riparian Land and Wetlands	<p>Riparian land is covered with permanent vegetation appropriate to the landscape setting.</p> <p>Stream channels are connected to their floodplains and functioning appropriately.</p> <p>Wetlands are mapped and delineated and their beneficial functions are maintained.</p> <p>Streambank soil loss does not exceed a level commensurate with upstream land use and normal geomorphological processes on site.</p>
Wildlife, Threatened and Endangered Species, and Biodiversity	<p>Wildlife is healthy and populations are at appropriate levels</p> <p>Habitat of threatened and endangered species is mapped and management practices are in place to maintain and enhance habitat. Habitat is managed to avoid actions that would reduce their current population, health, or sustainability.</p>

Characteristics of Properly Functioning Watersheds

Function	Characteristics
Food, Fiber and Bio-fuel Production	
	<p>Policies and practices are in place and applied to minimize impacts of introduced and invasive species and to minimize their spread.</p> <p>The ecosystem or habitat types support the necessary plant species in the kinds, amounts, and physical structure; and the connectivity of fish and wildlife cover is adequate to support, over time, the species of concern.</p>
Flooding	<p>The flood plain of the 1 percent chance flood is adequately defined and mapped.</p> <p>Floodplain development is properly managed to minimize future flood damage and losses.</p> <p>Excess water amounts and/or rates of flow are controlled consistent with desired present or intended land use goals and wetland policies.</p>
Point Source Pollutants	All point source pollutants have wastewater discharge permits, which specify effluent limits that assure that point sources will not cause a violation of Kansas' water quality standards.
Nonpoint Pollutant Sources	<p>All surface water meets the standards set out by KAR or TMDLs with implementation plans in place that assure surface water will meet water quality standards.</p> <p>All activities not required to have a wastewater discharge permit that can result in a discharge of pollutants or alteration of the physical, chemical and biological properties of surface and groundwater are conducted in a manner that minimizes the water quality impacts of these activities.</p> <p>Water bodies and contributing source areas are treated to allow sufficient water storage for present and intended uses.</p>
Ground Water Quality	<p>Groundwater will be free of substances associated with agricultural, industrial and urban activities and be typical of the mineral characteristics of aquifer geology.</p> <p>Pesticides, nutrients and organics are applied, stored, handled, disposed of, and managed so that groundwater uses are not adversely affected.</p>
Water Diverted for Consumption Groundwater Quantity	<p>Water diversions for consumptive purposes are limited such that surface water stream flows are not depleted below the level needed to sustain aquatic life, riparian plants and aesthetic values of the watercourse.</p> <p>All water diverted for consumptive uses is used appropriately and efficiently.</p> <p>Groundwater diversions do not exceed the annual recharge rate.</p> <p>Groundwater diversions do not interfere with or impair surface water flows.</p> <p>Authorized uses and management of water are coordinated to minimize the impacts on water course flows.</p>
Landscape Conversion and Development	<p>Development activities are sensitive to critical landforms (prime or important farmlands, groundwater recharge areas, etc.), hydrologic characteristics, and natural landscapes and cultural resources of the watershed are protected.</p> <p>Development activities do not exacerbate localized flooding or result in increased runoff causing accelerated erosion from the land surface or streambanks.</p> <p>Development sites are adequately protected from soil loss during and after road building and construction activities</p>

Characteristics of Properly Functioning Watersheds

Function	Characteristics
Food, Fiber and Bio-fuel Production	
	Important cultural and historical sites are identified and appropriately protected from loss.
Recreation	Water recreation activities are available Water recreation activities are not impaired by pollution or other hazards.

Appendix Five

US Department of Agriculture, Farm Service Agency	<ul style="list-style-type: none"> • Conservation Reserve Program 	<ul style="list-style-type: none"> • 1985 Food Security Act (FSA) • 1990 Food Agriculture Conservation and Trade Act • 1996 Federal Agriculture Improvement and Reform Act
US Army Corps of Engineers	<ul style="list-style-type: none"> • Planning Assistance to States • Regulatory Program • Environmental Restoration 	<ul style="list-style-type: none"> • Federal Water Resource Development Act (WRDA) 1974, Section 22 as amended • Federal Rivers and Harbors Act of 1899, Section 10 and Federal Clean Water Act, Section 404 • P.L. 99-662 as amended, Section 1135 • WRDA 1996, Section 206
US Geological Survey	<ul style="list-style-type: none"> • Water Resources Data • Interpretive Studies in Water Quality, Surface and Ground Water Hydrology 	<ul style="list-style-type: none"> • Organic Act of 1879 (20 Stat. 394; 43 U.S.C 3): Act of 1888 (25 Stat. 526): Act of 1896 (29 Stat. 453): Act of 1902 (32 Stat. 741; 44 U.S.C. 1318)
US Fish and Wildlife Service	<ul style="list-style-type: none"> • Environmental Contaminants • Ecological Services • Partners for Wildlife (Private Lands Program) 	<ul style="list-style-type: none"> • Fish and Wildlife Act of 1956; Fish and Wildlife Coordination Act; Anadromous Fish Conservation Act; National Environmental Policy Act; River and Harbor Act of 1899; FIFRA; Toxic Substances Control Act; Clean Water Act; CERCLA; Marine Protection, Research and Sanctuaries Act; Resource Conservation and Recovery Act of 1976; Surface Mining Control and Reclamation Act of 1977; Migratory Bird Treaty Act; and Endangered Species Act

Source: *State and Federal Water Programs Manual*, Kansas Water Office, 2009. Available online at: http://www.kwo.org/Reports%20%26%20Publications/Rpt_Programs_Manual_2009.pdf
Please refer to this document for program descriptions and contact information.

APPENDIX SIX

Acronyms

ARRA – American Recovery and Reinvestment Act
BAC – Basin Advisory Committee
BEFS – Bureau of Environmental Field Services
BMP – Best Management Practice
BOW – Bureau of Water
CRP – Conservation Reserve Program
CWA – Clean Water Act
CSIMS – Cost-Share and Information Management System
DO – Dissolved Oxygen
EPA – Environmental Protection Agency
EQIP – Environmental Water Quality Incentives Programs
FFY – Federal Fiscal Year
FSA – Farm Service Agency
GRTS – Grant Reporting and Tracking System
HUC – Hydrologic Unit Code
KCARE – Kansas Center for Agricultural Resources and the Environment
KCW – Kansas Clean Water
KDHE – Kansas Department of Health & Environment
KDWP – Kansas Department of Wildlife and Parks
KSU – Kansas State University
KWA – Kansas Water Authority
KWO – Kansas Water Office
KWRI – Kansas Water Resources Institute
LEPP – Local Environmental Protection Program
NGO – Non-Governmental Organizations
NHD – National Hydrography Dataset
NPDES – National Pollutant Discharge Elimination System
NPS – Nonpoint Source
NRCS – National Resources Conservation Service
NRI – National Resources Inventory
RC&D – Resource Conservation & Development
SCC – State Conservation Commission
SFY – State Fiscal Year
SLT – Stakeholder Leadership Team
SWA – Source Water Assessment
SWP – Source Water Protection
SWPP – Source Water Protection Plan
TMDL – Total Maximum Daily Load
TN – Total Nitrogen
TP – Total Phosphorus
TSS – Total Suspended Solids
USDA – United States Department of Agriculture
USGS – United States Geological Survey
WMS – Watershed Management Section
WRAPS – Watershed Restoration and Protection Strategy