

City of Leavenworth, Kansas



January 1, 2023 - December 31, 2023

Kansas Permit No: M-MO12-SN01

Federal Permit No: KSR044011

February 28, 2024



February 28, 2024

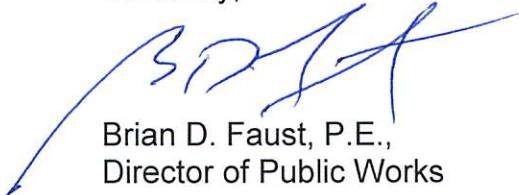
Municipal Programs Unit
Kansas Department of Health & Environment
1000 SW Jackson, Suite 420
Topeka, Kansas 66612-1367

**RE: CITY OF LEAVENWORTH
KANSAS STORMWATER 2023 ANNUAL REPORT FORM FOR MUNICIPAL
SEPARATE STORM SEWER SYSTEMS (MS4)**

Please find the following submitted for compliance with 2023 Annual Report for Stormwater.

Please do not hesitate to call me at (913) 684-0375 if you have any questions.

Sincerely,



Brian D. Faust, P.E.,
Director of Public Works

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Six Minimum Control Measures for MS4s with NPDES Permit
(Documentation)

ITEM 6 Certification

RESOLUTION NO. B-2360

A RESOLUTION APPROVING THE 2023 KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT (KDHE) ANNUAL REPORT FOR STORMWATER AND AUTHORIZING THE CITY OF LEAVENWORTH, KANSAS, TO SUBMIT THE REPORT TO KDHE.

WHEREAS, the City of Leavenworth, Kansas is regulated by the Kansas Department of Health and Environment (KDHE) and the US Environmental Protection Agency (EPA) as a Phase II City for stormwater purposes; and

WHEREAS, the City of Leavenworth, Kansas has prepared the Annual Report for Stormwater as required and reviewed such report at the February 13, 2024 City Commission meeting allowing time for public review and input prior to approval by the Governing Body.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS:

Section 1. That the 2023 Annual Report for Stormwater reflects the direction, efforts and accomplishments by City of Leavenworth for calendar year 2023. It shall be an official record of these actions to meet the requirements of Kansas Department of Health and Environment (KDHE) for an Annual Report until or unless changed by official action.

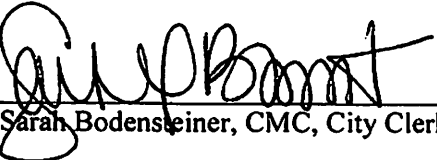
PASSED AND APPROVED this 27th day of February 2024.

CITY OF LEAVENWORTH, KANSAS



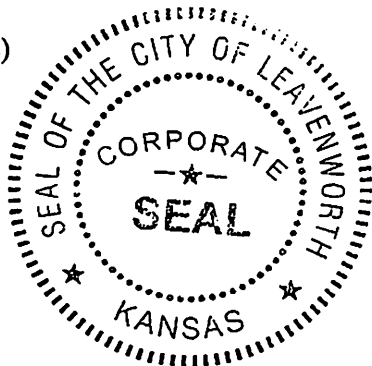
Griff Martin, Mayor

ATTEST:



Sarah Bodensteiner, CMC, City Clerk

(SEAL)



**KANSAS STORMWATER 2023 ANNUAL REPORT FORM FOR MUNICIPAL SEPARATE
STORM SEWER SYSTEMS (MS4)**

Please place an "X" in the left box if any information has changed from previous years

<input type="checkbox"/>	Permittee [Agency Name] Mailing Address 1:	City of Leavenworth
<input type="checkbox"/>	Mailing Address 2:	100 N. 5th Street
<input type="checkbox"/>	Municipality:	Leavenworth
	State:	Kansas
<input type="checkbox"/>	Zip Code:	66048
<input type="checkbox"/>	MS4 Program Contact - Person:	Brian D. Faust
<input type="checkbox"/>	Contact E-Mail Address:	brian.faust@firstcity.org
<input type="checkbox"/>	Contact Phone Number:	913-684-0375
<input type="checkbox"/>	MS4 Program Construction Contact - Person	Michael T. Stephan
<input type="checkbox"/>	Construction E-Mail Address:	mstephan@firstcity.org
<input type="checkbox"/>	Contact Phone Number:	913-684-0375
<input type="checkbox"/>	Kansas Permit Number: — Ex. M-MC21-SU01	M-MO12-SN01

Reporting period covers activities from January 1, 2023 through December 31, 2023.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28th, 2024. The annual report is to be submitted as PDF files to KDHE via Kansas Environmental Information Management System (KEIMS). There is no requirement to provide hard copies of any documents.

ITEM 1
Stormwater Management Program

City of Leavenworth
Stormwater Management Program

Adopted by the City Commission October 27, 2020.

City of Leavenworth Stormwater Management Program

October 27, 2020

PROGRAM HISTORY

The City of Leavenworth was established in the 1850s along Three-Mile Creek and on the banks of the Missouri River. Since that time, the City has grown to include most of the Three-Mile Creek and Five-Mile Creek watersheds. (A map showing the aforementioned area is on the next page.)

There has been a history of flooding since the founding of the City, with notable examples and additional information in the attached Appendix. The most recent dramatic example was in October 2005 where an estimated 11 inches of rain fell in a four-hour period, causing significant property damage throughout the community. On July 6, 2015 over three inches fell in a one-hour period also causing significant damage.

It is understandable that the City focused efforts since at least the 1980s to improve stream capacity to reduce flooding. Key improvements include:

- Fifteen replaced major bridges.¹
- Channel improvements on Three-Mile Creek between Missouri River and Broadway including removal of railroad trestle west of 7th Street
- Stormwater Master Plan (1997)
- FEMA Floodplain Revisions on Three-Mile Creek, especially in the downtown area (2014 and 2015)
- Approved sales tax with dedicated stormwater funding (1995, 2005, 2015)
- Approved Stormwater Fee in 2018 (Implemented in 2019)

During the late 1980s, the Environmental Protection Agency (EPA) determined that stormwater discharges from urban areas were having a negative impact on the nation's waterways. In the 1990s, Congress expanded the Clean Water Act authority to regulate municipal stormwater discharges under the National Pollutant Discharge Elimination System (NPDES). Phase I regulations were implemented in 1990 for large municipalities and Phase II regulations were implemented in 1999 for smaller municipalities such as Leavenworth.

The City of Leavenworth received its first NPDES stormwater permit from the Kansas Department of Health and Environment (KDHE) in 2004, along with 58 other regulated entities. All regulated Phase II entities have the same six minimum requirements:

¹ Listing of replaced bridges since 1980 is attached to this report.

City of Leavenworth, KS

Stormwater Management Data Collection

Legend

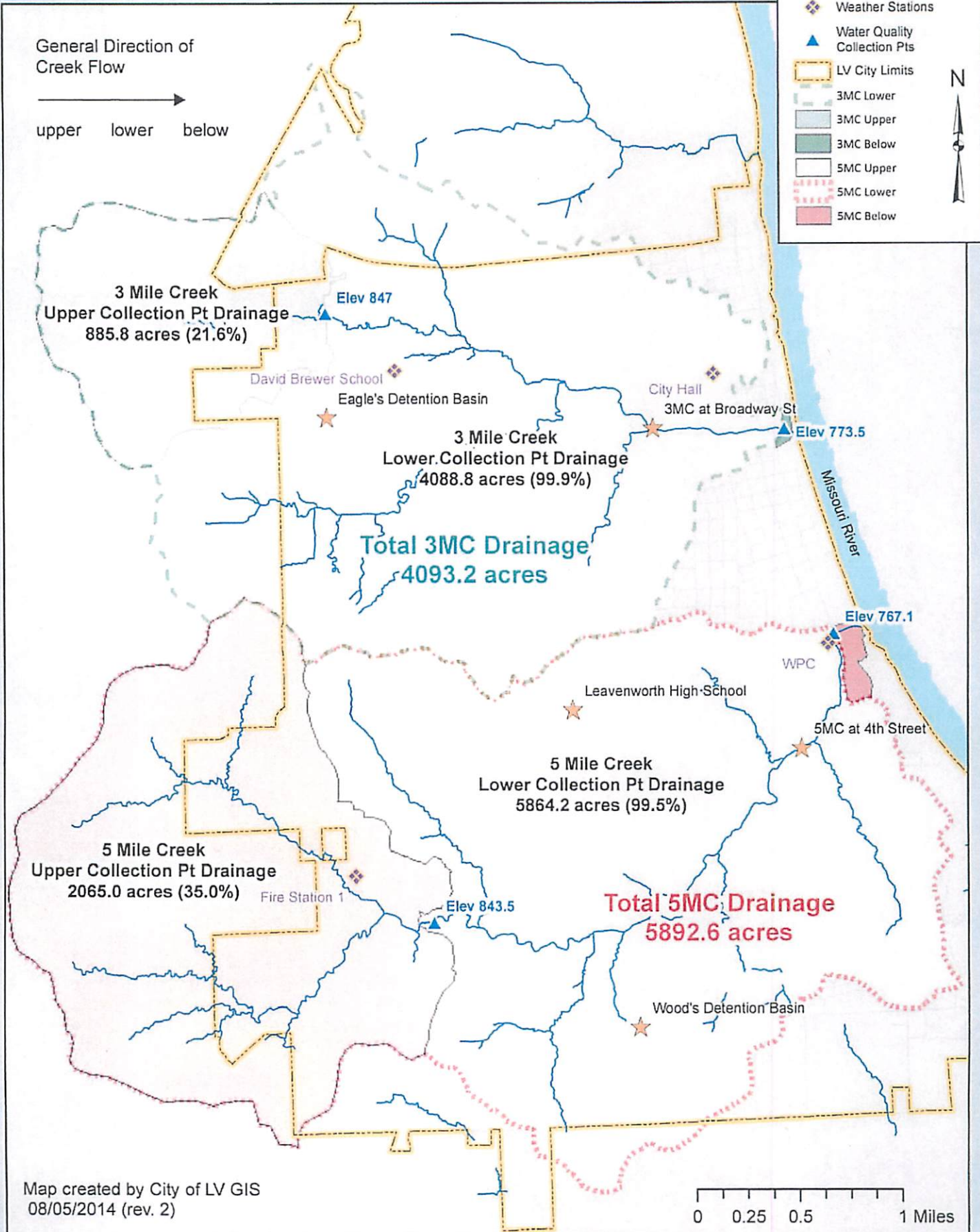
- ★ Data Loggers
- ⊠ Weather Stations
- ▲ Water Quality Collection Pts
- ⬡ LV City Limits
- ▨ 3MC Lower
- ▨ 3MC Upper
- ▨ 3MC Below
- ▨ 5MC Upper
- ▨ 5MC Lower
- ▨ 5MC Below



General Direction of
Creek Flow

→

upper lower below



- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Runoff Control
- Pollution Prevention and Good Housekeeping

A new Five-Year NPDES permit was issued to City of Leavenworth in 2019 which includes the six minimum control measures. The intent of the permit is that the City will conduct programs and enact/enforce regulations that are generally expected to improve water quality entering the streams from the City.

A variety of activities have been identified by KDHE as being appropriate for the purpose of reducing pollution. These activities are often known by the term “Best Management Practice” (BMP). The City is required to participate in at least a sufficient number of these activities to meet the participation guidelines of the State between 2020 and 2024. This is accomplished by creation of this document – known as the “**Stormwater Management Program**” (SMP) in calendar year 2020, and carrying out the BMP items 2021 through 2024.

Staff has identified specific activities that will provide the required number of points for the duration of the permit. A table showing these activities and the associated point value is included in this document.

The City is required to submit an annual report to KDHE related to stormwater activities. This annual report is typically submitted in February of each year after a review by the City Commission of the Stormwater Management Program and of the Annual Report.

STORMWATER PROGRAM GOALS

The stormwater program of the City has two goals:

- Protect people and property from flood events
- Protect and enhance water quality

The City works to meet these goals by having a qualified staff and appropriate standards for design and construction of improvements.

STAFF

The Public Works Department staff includes engineers, inspectors, technicians, GIS mappers and project managers who review plans for all projects. The Community Development Department also reviews plans for compliance with zoning ordinances.

The Street Division has significant staffing and equipment resources to assist in addressing stormwater matters that may occur. There are two full-time stormwater employees who inspect, evaluate, clean and perform small repairs on existing

stormwater infrastructure. The Community Development Department has two full-time inspectors to evaluate zoning matters within the City including stormwater concerns. Employees of Water Pollution Control (wastewater) are actively engaged in maintaining the wastewater collection system to prevent sanitary sewer overflows of all types. They perform any water quality or water quantity measuring and testing work required.

Use of the GIS system to assist in managing stormwater has greatly increased in the last five years. The detailed system information is available online to the public. Additional GIS tools include internal development of data loggers to enter field information on stormwater structures and locations.

PROGRAM TOOLS

The City uses a variety of tools to assist in the evaluation and management of stormwater issues. The primary entry point for information is the City of Leavenworth Web page. Three key locations are:

1. Stormwater Fee focused pages managed by the City Manager's Office at: www.leavenworthks.org/ctymanager/page/stormwater-projects
2. Stormwater Management Program pages on Public Works pages at: www.leavenworthks.org/publicworks
3. GIS site: www.gis.firstcity.org

The following documents and activities are a key part of the current program and are available or linked to online through the City website.

1. Stormwater Master Plan (1997 by Black & Veatch)
2. Stormwater Design Guidelines (March 2015)
3. American Public Works Association Section 5600 as a guideline (2011)
4. MARC/APWA BMP Manual as a guideline (2012)
5. Floodplain Management (20103CV000B, July 2015)
6. Requiring a "Land Disturbance Permit" for most construction activity (March 2015)
7. Various City Ordinances
8. Submit Annual Report to KDHE after review by City Commission

STORMWATER MANAGEMENT PROGRAM IMPLEMENTATION

City Staff has reviewed the KDHE list of activities related to the six minimum control measures. Several activities associated with each of the six minimum control measures have been identified as being appropriate for Leavenworth. The intent is that the City and residents participate in the identified activities to ensure the needs of the community are addressed and the City complies with the KDHE/NPDES requirements.

The new permit requirements focus obtaining point totals through measureable activities. *The majority of these identified activities are currently in place and do not require further action beyond more detailed descriptions and expectations for each*

activity. It is expected that this effort will be reviewed with the Commission as needed and at least annually during preparation of the annual report.

Additional actions by the City will be necessary to achieve all of the necessary points, primarily through adoption of more formal design guidelines and creating better enforcement mechanisms:

- Review and Adopt APWA 5600 in a greater capacity than simply a reference.
- Review and Adopt MARC BMP Manual in a greater capacity than simply a reference.
- Adopting additional resolutions or ordinances to enable better enforcement of the regulations.

Please do not hesitate to contact the Office of the City Engineer should you have any questions regarding this program.

Michael G. McDonald
City Engineer
Public Works Director
City Hall
100 N. 5th Street
Leavenworth, KS 66048
mmcdonald@firstcity.org
913-684-0375

Attachments

- FEMA Narrative on Flood Events from FIS 20103CV000B
- Stormwater Management Program Goals
- Listing of Replacement Bridges since 1980

1. <u>PUBLIC EDUCATION & OUTREACH (ED & O)</u>	2021	2022	2023	2024
	4 Points Total		7 Points Total	
BMP PROGRAM	POINTS			
<u>ED & O - 01</u> - Maintain a stormwater webpage for the permittee.	3	2	2	2
<u>ED & O - 02</u> - Distribute educational materials (either flyers, brochures, catalog mailings, handouts, or e-mails) addressing various pertinent stormwater public education topics.	2	2	2	2
<u>ED & O - 03</u> - Provide either training or educational materials to permittee identified businesses at high risk of contributing to stormwater pollution.	2	2	2	2
<u>ED & O - 04</u> - Apply notification, placard, covers/hatches with message, or stencil, on stormwater inlets to provide a message similar to "No Dumping – Drains to River"		2		2
<u>ED & O - 05</u> - Post the municipality's MS4 permit and SMP document on either the stormwater web page or the municipal webpage.	1	1	1	1
<u>ED & O - 12</u> - Create a stormwater information brochure to provide to the public at public meetings and/or hearings.	1	1	1	1
<u>ED & O - 13</u> - Operate an adopt-a-highway program to utilize public volunteers to clean road right-of-way.	1	1	1	1
<u>ED & O - 15</u> - Hold a social media campaign addressing various pertinent stormwater public education topics.	2	2	2	2
<u>ED & O - 17</u> - Operate an adopt-a-street program to utilize public volunteers to clean street right-of-way.	1	1	1	1
TOTAL	15			

2. <u>PUBLIC INVOLVEMENT/PARTICIPATION (P I/P)</u>	2021	2022	2023	2024
	3 Points Total		6 Points Total	
BMP PROGRAM				
POINTS				
<u>P I/P - 01</u> - Hold a public hearing or public forum to notify the public about stormwater program activities and to solicit public comments regarding stormwater issues.	2	2	2	2
<u>P I/P - 03</u> - Hold park or stream bank clean-up events for public volunteers to aid municipal staff in removing trash, debris, or pollutant sources from the selected clean-up area.	3	3	3	3
<u>P I/P - 04</u> - Train either citizen watch groups, homeowner associations (HOAs), or public service groups to recognize illicit discharge activities and communicate observations to appropriate municipal staff.	2	2	2	2
<u>P I/P - 05</u> - Provide at least two events for residents to engage in cleanup activities and improve water quality in the municipality.	3	3	3	3
TOTAL	10			

3. <u>ILLCIT DISCHARGE DETECTION & ELIMINATION (IDD & E)</u>	2021	2022	2023	2024
	5 Points Total		7 Points Total	
BMP PROGRAM				
POINTS				
IDD & E - 04 - Implement a program to evaluate MS4 outfalls to identify illicit discharges.	1	1	1	1
IDD & E - 06 - Inspect, by televising pipelines or direct visualization of open channel drainage, 2% of the MS4 system within the permit area all conducted within a 12-month period to aid in identifying illicit discharges as well as evaluate the condition of the storm sewer lines/drainage channels-ditches.	3	3	3	3
IDD & E - 07 - Implement a Household Hazardous Waste Collection Program (HHWCP) or document others have implemented such a program to provide such service to all property owners or residents located within the permit area.	3	3	3	3
IDD & E - 10 - Inspect, 5% of the MS4 system Stormwater inlets and/or outfalls within the permit area all conducted within a 12-month period to aid in identifying illicit discharges.	3	3	3	3
TOTAL	10			

4. <u>CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (CSSRC)</u>	2021	2022	2023	2024
	4 Points Total		6 Points Total	
BMP PROGRAM	POINTS			
CSSRC - 01 - Implement a requirement for a Soil Erosion and Sediment Control (SESC) Plan for any land disturbance sites which are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	3	2	2	2
CSSRC - 02 - Develop and adopt a design manual for erosion and sediment control BMPs which are required to be used on sites which will be disturbed and are either equal to or greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	3	2	2	2
CSSRC - 04 - Develop a site plan review process which considers potential water quality impacts which may occur during construction as well as post construction impacts.	3	2	2	2
CSSRC - 07 - Acquire or develop a software tracking system to track inspections and related tasks.	1	1	1	1
TOTAL	10			

5. <u>POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT & REDEVELOPMENT PROJECTS (P-C SM)</u>	2021	2022	2023	2024
	5 Points Total		7 Points Total	
BMP PROGRAM	POINTS			
P-C SM - 01 - Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and re-development construction sites which are greater than 1 acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more. (Points shown reflect adopting existing APWA/MARC manuals)	6	5	5	5
P-C SM - 03 - Develop and implement a program to ensure adequate long-term cleaning, operation and maintenance of all municipally owned or operated post-construction structural stormwater BMP facilities.	3	2	2	2
P-C SM - 05 - Develop and implement a program for inspection of permittee owned structural BMPs which includes implementation of needed maintenance to ensure long-term operation of the BMPs.	3	2	2	2
P-C SM - 06 - Develop and implement a program for inspection of known privately owned structural BMPs which includes providing the owner of the BMPs an inspection report which specifies needed maintenance to ensure long-term operation of the BMPs.	3	2	2	2
TOTAL	15			

6. <u>POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (PP/GH)</u>	2021	2022	2023	2024
	4 Points Total		6 Points Total	
BMP PROGRAM				
POINTS				
PP/G H - 01 - Install a screening device or method at a single municipal storm sewer outfall or on the storm sewer line immediately upstream of the outfall to reduce the discharge of floatables or other objects to receiving waters.	3	2	2	2
PP/GH - 03 - Develop a guidance document for municipal staff or third-party contractors which apply pesticides.	2	1	1	1
PP/GH - 05 - Implement a program for street sweeping in which the street sweepings are collected and disposed of properly or recycled/reused if possible.	3	2	2	2
PP/GH - 07 - Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris.	1	1	1	1
PP/GH - 08 - Develop, implement and keep updated an online storm sewer map accessible to the public.	3	2	2	2
PP/GH - 12 - Install a stormwater treatment system for capture of either trash, sediment, or debris.	3	2	2	2
TOTAL	15			



**LEAVENWORTH COUNTY,
KANSAS**
AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
BASEHOR, CITY OF	200187
EASTON, CITY OF	200188
LANSING, CITY OF	200189
LEAVENWORTH, CITY OF	200180
LEAVENWORTH COUNTY UNINCORPORATED AREAS	200186
LINWOOD, CITY OF	200191
TONGANOXIE, CITY OF	200192



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REVISED: July 16, 2015



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER

20103CV000B

City of Leavenworth

The flood producing characteristics of Threemile, South Branch, and Fivemile Creeks are typical of small watersheds in the Midwest region. Past flood flows have usually been caused by short duration thunderstorms having high intensity rainfall. Conversely, flood problems associated with the Missouri River are usually caused by long protracted fronts occurring over large areas. There are no natural obstructions to flood flow in the Threemile Creek floodplain. Obstructions restricting floodwater flow have been created by man's continued encroachment on the Threemile Creek floodplain. Severe restrictions to flood flow have been created in the past by construction of many bridges located in the floodplain between Tenth Street and the mouth. In addition, a portion of the creek channel had been enclosed in a box culvert located under the railroad yards between Seventh Street and Broadway. Because of inadequate openings in these bridges and culvert, a cumulative aggravation of flood backwater occurred in the lower floodplain.

The City of Leavenworth embarked on a substantial effort to improved flooding conditions downstream of Tenth Street in the early 1980's. The bridge on Tenth Street was replaced in 1983, the bridge on Cherokee (west of Broadway) in 1981, and the bridge on Shawnee west of Tenth in 1985. The rail yard trestles were removed by 1988. In addition, new bridges have been constructed at Third Street, Sixth Street, Seventh Street, Broadway and Shawnee Streets since 1988. Construction of a pedestrian trail at creek level between Esplanade Street and 7th Street contributed to larger channel cross sections between Fourth Street and Seventh Street and generally improved flow characteristics. A new bridge at Second Street is expected to be constructed in 2015. A significantly larger natural open channel was constructed between 6th Street and Cherokee Streets in the early 1990's.

The improvements since the last FIS have had a significant impact on the critical area near Cherokee and Broadway Streets. At this location flood flows were impeded by small bridge openings at Cherokee Street and at Broadway Street that forced excess water out of banks through the developed floodplain area along Cherokee Street. Flow from this area attempting to return to the channel was further impeded by the now removed railroad yard culvert. Flooding at Cherokee Street occurs less often with the construction of the noted improvements.

Channel restrictions between Cherokee Street and Shawnee Street west of Broadway remain. These restrictions continue to pose a threat to structures along Miami St. between 8th St. and 10th St.

Since there is no stream gaging stations on Threemile Creek or its South Branch, documentation of flood problems affecting Leavenworth in the past rely completely upon historical accounts. Detailed investigations have been made of flooding which occurred in July 1958 and October 1961. In addition, fragmentary records of 11 additional floods have been found through a search of newspaper files. It appears that the maximum known flood prior to 1972 occurred in 1904. This flood had an estimated peak discharge of 7,000 cubic feet per second (cfs) at the mouth (between the discharge of a 50-year and 100-year flood), and 6,500 cfs at Seventh Street. The following composite accounts describe the July 1958 and October 1961 events experienced on Threemile Creek.

On July 30, 1958, more than 4 1/2 inches of rain fell in the Leavenworth area. Damage estimated at \$30,000 was reported from businessmen and homeowners from the resulting flood on Threemile Creek. The downtown area was hardest hit, especially on Cherokee from Broadway to Seventh Street where the discharge of the flood was estimated at 4,300 cfs.

On October 13, 1961, three to four inches of rainfall fell in the Leavenworth area. The resulting flood on Threemile Creek exceeded bank full capacity at 7:00 PM, crested at about 9:00 PM, and receded to within-bank stages at 11:30 PM. The flood caused \$71,000 damage in Leavenworth, of which \$58,700 was damage to 24 business places and 16 residences, and the remainder was damage to transportation facilities and municipal property. The discharge at Seventh Street was estimated at 4,000 cfs.

The City of Leavenworth Public Works Department has identified the following significant flood events since 1972 (Reference 12). In all cases - water overtopped the bank upstream of Cherokee Street and flowed east along Cherokee Street, returning to the banks of the creek at 6th Street. Flooding of the 800 and 900 blocks of Miami also occurred in the same years noted below causing damage to residences and businesses. Water has been as high as two feet deep in Miami Street. The city has purchased several homes using "buy-out" programs, and worked with businesses to ensure that they take appropriate measures to minimize risks from flooding. Some of them ore notable events include:

- July 6-7, 1986 - 10.4 inches of rain fell, causing water to flow down Cherokee Street and floating several automobiles and trailers.
- May 15, 1990 - 4.4 inches of rain fell causing minor flooding.
- October 4th, 1998 - between six and eight inches of rain fell in a twelve hour period causing damage on Cherokee Street and areas upstream of Shawnee (west of Tenth Street). Damage was also noted in the 800 and 900 blocks of Miami Street.
- 1993 - Local heavy thunderstorms combined with an elevated water surface in Three-Mile Creek from record flooding on the Missouri River from record flooding on the Missouri River resulted in significant flooding along Cherokee Street.

- October 2nd, 2005 - a NWS gage recorded 5.6 inches of rain, but eyewitness accounts and anecdotal evidence supports between seven and eleven inches of rain falling in a four hour period in some locations. The resulting flood was identified as the worst in memory, and flooded structures between 11th Street and downstream to 6th Street. A new bridge was under construction at 6th Street, and the debris caused the complete collapse of the falsework. The floodwater and debris and falsework passed through the old railroad Bridge at Esplanade Street which acted as lens and focused the stream upon the mouth of the creek at the Missouri River. The jet of water undermined the sanitary sewer along the banks of the Missouri River. A hole that later measured as over forty feet deep appeared where the sewer had been buried twenty feet below the creek bottom. The sewers were repaired by late 2006 at a total cost of about \$1,000,000. Estimates of flow were later determined by Black & Veatch Engineers as being in excess of 7,500 cfs at Esplanade street.
- There has been no further flooding of Cherokee Streets between 2005 and October 2014.

Flood damage along South Branch of Three-Mile Creek has typically been much less severe than that along the Main Branch of Threemile Creek. Damage to road crossings and property near Eleventh Street as well as scouring is likely to take place during floods.

Severe restrictions from bridges across Five-Mile Creek have been addressed with new structures at Fourth Street, Second Avenue/Limit Street and Shrine Park Road since 1972. Inadequate openings of the older bridges had caused a cumulative aggravation by flood backwater in the floodplain.

Newspaper accounts provide most of the history of flooding on Fivemile Creek prior to the 1970's. These accounts reveal that flooding has occurred several times in the past. Notable floods were reported in June 1942, July 1958, October 1961, April 1969, and September 1970. Unfortunately, precise data regarding flood levels reached by these floods have not been documented.

The flood of July 30, 1958, had Fivemile Creek flooding Shrine Park Road, Limit Street and U.S. 73 at Black Bridge (Reference 1).

The flood of October 12, 1961, swept away cut brush laying in the vicinity of the sewage treatment plant at Second and Fivemile Creek (Reference 1).

On April 26, 1969, Fivemile Creek ran 10-12 inches deep across Shrine Park Road, just south of the entrance to the golf club. Along south Fourth Street the stream spread out for a half mile or more and at Second Street, in the vicinity of the sewage disposal plant, the creek rose to the edge of the street (Reference 1).

Heavy rains since 1988 often result in water flowing across Shrine Park Road at low areas north of the new bridge and across Tenth Avenue at Wellington Drive. These events also result in significant erosion and scouring of the creek bank. Water has crossed the bridge at Second Avenue and Limit Street on several occasions at depths up to six inches since 1988. One notable event occurred on October 4, 1998, when 4.74 inches of rain fell in two hours (measured in south Leavenworth), and it resulted in ten inches of water across Tenth Avenue at Wellington, 24 to 30 inches across Shrine Park Road north of the bridge, and six to eight inches across Limit Street (Reference 12). A new larger bridge at this site is completed (2014) and is expected to reduce and possible eliminate roadway flooding at this location.

The City of Leavenworth is above the floodplain of the Missouri River except for the areas where Threemile and Fivemile Creeks and other smaller right bank tributaries enter the Missouri River. Recorded damage to the city, caused by flooding from the Missouri River, occurred when an emergency levee failed during the April 1952 flood. The flood caused a total of \$125,200 damage in Leavenworth. The damages were \$12,000 to business property, \$12,600 to homes, and \$600 to public property. The Wastewater Treatment Plant had never been threatened by flooding until it was inundated in the 1993 Missouri River Flooding, with repair costs in excess of \$1 million required to restore service. The plant has been threatened to a level requiring sandbagging and other measures at least three additional times since 1993, most notably in 2011 due to releases from Corps of Engineers dams upstream when the levels were within six inches of the city closing the plant.

Second Street north of Five-Mile Creek is subject to standing water and flooding from high water in the Missouri River and is then closed to protect the public. This has happened at least five times since 1988.

The Riverfront Community Center (Union Railroad Depot) was protected from flooding in 1993 when nearly four feet of water from the Missouri River threatened the structure. Heroic efforts by the community created a sizable protective sandbag wall that prevented flooding, but the building suffered related damage requiring over \$300,000 in repairs. It has been necessary to construct flood protective measures at least three times since 1993 with expenses typically in excess of \$10,000 on each occasion. The City expects to construct a permanent floodwall with a FEMA grant in 2015 to reduce expenses and damage from future floods.

A combined effort of Leavenworth County, City of Leavenworth and City of Lansing resulted in a recording stream gage being installed at the Leavenworth Waterworks Intake structure on Dakota street in September 2012. This is expected to improve flood evaluation and forecast activities.

CITY OF LEAVENWORTH, KANSAS
2019 BRIDGE INSPECTION OF MAJOR BRIDGES REPLACED SINCE 1980
TABLE 1: GENERAL BRIDGE INFORMATION

Local Bridge No./ NBI Number	Description	Year Built	Bridge Roadway Width (Ft) ²	Traffic Volume (VPD) (2007)	Inventory Rating HS-Truck (Tons)	FHWA Sufficiency Rating	Fracture Critical	Abutment Foundation Type	Pier Foundation Type	Geology Type	Underwater Inspection Type ²	Scour Critical ³	NBI Bridge Condition
A.95-2.45/ 415400523515002	10th St. @ Three Mile Creek 33'-44'-33' Concrete Haunched Slab Spans	1983	33.1	7170	35.6	95.3	No	Unknown	Spread Footings	Unknown	I	No	Good
A.98-2.34/ 41540052350007	Shawnee St. @ S. Branch of Three Mile Creek Single 24' x 10' RFB	1984	32	2450	36	99.8	No	NA	NA	Unknown	I	No	Good
A.98-2.69/ 41540052350008	Shawnee St. @ Three Mile Creek 30'-40'-30' Concrete Haunched Slab Spans	2007	36.5	2325	45.1	97.8	No	Piling	Piling	Stone	I	No	Good
B.09-2.30/ 5154005200000B9	Cherokee St. @ Trib. to Three Mile Creek 43.5' Precast Concrete Arch	2016	26.5	1870	32.1	98.0	No	Footing	NA	Unknown	I	No	Good
B.09-2.80/ 41540052356001	Cherokee St. @ Three Mile Creek 24.5'-31'-24.5' Concrete Flat Slab Spans	1981	40.4	3130	37.7	98.7	No	Steel Pile	Steel Pile	Limestone	I	No	Good
B.13-2.85/ 415400523519025	Broadway St. @ Three Mile Creek 48'-64'-48' Concrete Haunched Slab Spans	1991	40.4	4435	50.3	98.6	No	Steel Pile	Footings	Shale	I	No	Fair
B.13-2.96/ 415400523523023	7th St. @ Three Mile Creek 34'-42'-34' Concrete Haunched Slab Span	1991	40	5725	39.7	97.5	No	Steel Pile	Steel Pile	Bedrock	I	No	Good
B.13-3.08/ 415400523525942	6th St. @ Three Mile Creek 35'-46'-35' Concrete Haunched Slab Span	2007	27.5	1035	62.4	83.1	No	Piling	Piling	Unknown	I	No	Good
B.15-3.33/ 415400523531005	3rd St. @ Three Mile Creek 40'-50'-40' Prestressed Concrete Girder Spans	1988	39.4	2795	54.6	97.7	No	Steel Pile	Spread Footings	Shale	I	No	Fair
B.15-3.42/ 415400523533004	2nd St. @ Three Mile Creek 40' Concrete Arch Deck Span	2017	27	1100	41.4	83.0	No	Unknown	NA	Unknown	I	No	Good
C.16-3.69/ 415400523533003	2nd St. @ Five Mile Creek 33'-44'-33' Concrete Haunched Slab Span	1981	36.1	2900	38.7	86.7	No	Steel Pile	Steel Pile	Shale	I	No, POW in place	Fair
C.97-3.30/ 415400523527970	Limit St. @ Five Mile Creek 36'- 48'-36' Concrete Haunched Slab Span	2014	44.0	8600 (2012)**	58	82.0	No	Steel Pile	Steel Pile	Unknown	I	No	Fair
D.00-1.48/ 415400523510990	Limit St. @ Trib. to Five Mile Creek Single 20' x 12' RFB	2014	24	3500 (2102)**	51.9	99.9	No	NA	NA	Unknown	I	No	Good
D.32-3.00/ 415400523521006	Shrine Park Rd @ Five Mile Creek 40'-50'-40' Concrete Haunched Slab Span	1993	34.1	5500	25.2	86.8	No	Steel Pile	Steel Pile	Bedrock	II	No	Good
D.51-2.50/ 415400523513851	10th Ave. @ Five Mile Creek Double 16' x 12' RFB	1980	50	7105	21.8	63.4	No	NA	NA	Unknown	I	No	Fair

ITEM 2

Executive Summary

To satisfy the requirements of the NPDES permit, this annual report summarizes the City of Leavenworth's plans and actions to reduce the discharge of pollutants from the municipal separate storm sewer system (MS4) to the maximum extent practicable; to protect water quality, and to meet the appropriate water quality requirements of the Clean Water Act. The information contained within this report was obtained through interviews with City staff, review of permits and projects from 2023, and examining communications and publications made available to the citizens of Leavenworth.

As the City of Leavenworth has transitioned past the COVID-19 Pandemic, we continued to struggle with filling vacant positions in our Operations and Water Pollution Control Divisions. Significant increases in construction costs and supply chain issues have also impacted our day to day operations.

City staff pursued activities in all of the Six Minimum Control Measures throughout the year. Key observations for the purposes of this report are shown below.

- 1. Were there any aspects of the program that appeared especially effective at reducing pollutants in your stormwater discharge?**
 - Contractor and public compliance with implementation of the Land Disturbance Permit requirements is improved over the initial years and is generally satisfactory.
 - Street sweeping is an effective tool for removing pollutants.
 - Use of "Stormwater Utility" funds to address long-standing issues has reduced erosion in several locations through the "Orange Fence Repair Projects".

- 2. Were there any aspects of the program that provided unsatisfactory results?**

While most items identified as BMPs (Best Management Practices) are believed to be effective at some level, the passive education and information sharing such as leaving material at the Library and City Hall along with informational brochures available on the City's website were probably the least effective tools identified.

- 3. What was the most successful part of the program?**

The visibly effective measures of correctly installed construction site runoff control and post-construction activities were the most successful parts of the program. On numerous public improvement projects, City staff ensured that measures were installed and maintained. These activities are very visible to residents living in the area and to the traveling public.

- 4. What was the most challenging aspect of the program?**

The most challenging was having developers install and properly maintain construction site runoff control. New development remained slow in 2023 with the higher interest rates so there were less homes under construction. The new developments that were actively under construction struggled with keeping their sites in compliance with approved erosion control plans. The City notified developers that stop work orders would be issued on projects if conditions were not immediately addressed. This had the desired effect and the appropriate measures were installed. However, the City has had to remind developers on multiple occasions to inspect, repair and maintain their measures.

- 5. Describe any City/County area MS4 clean ups and the participation.**

- The City of Leavenworth sponsored a "City-Wide" clean-up day with 43 groups picking up trash. This event was held on April 22, 2023.

- Leavenworth County provides HHW (Household Hazardous Waste) services throughout the year and a special event to dispose of HHW was held at the Municipal Service Center in April, 2023.
- The City has a "Three-Mile Creek" monthly clean-up program in which citizens pick up trash. In 2023, there were nine citizen groups that received a \$500 donation per group from transient guest tax dollars.

6. Describe the elected officials' participation in the stormwater pollution elimination.

The City Commission has supported stormwater pollution elimination by creating a "Stormwater Utility" that is funded by a fee on all properties. This fee is used to address longstanding stormwater issues in the community, including reduction or elimination of erosion caused by failing roadways and culverts along with impacts to streambanks from shifting channel alignments. The Commission has also supported the goal of having public and private projects with some level of permanent water quality improvement included.

The City Commission reviewed and approved the new Stormwater Management Plan (SMP) on October 27, 2020. Staff was also directed to proceed with ordinances related to fees/fines for operation of BMP installations, construction sites, grease traps and general maintenance of permanent water quality structures.

7. Describe the collaboration with other organizations to eliminate stormwater pollution.

- The City coordinated a "City-Wide" clean-up day with about 35-50 groups which was held on April 22, 2023
- Leavenworth County provided one HHW (Household Hazardous Waste) collection service in April 2023.

8. If an audit/inspection of your MS4 program was conducted by EPA or KDHE during the year, list the items the audit/inspection report identified as required changes and provide a narrative explanation of how the changes were implemented or explain the plan to implement the changes and identify a target date for final implementation.

There were no known inspections of the MS4 program by KDHE or EPA in 2023.

ITEM 3

New Stormwater Ordinances/Resolutions

These are shown here with title and brief description.

Full documentation can be found at:

<https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report>

- Policy Report No. 24-08 - *Review Final of 2023 KDHE Annual Stormwater Report and Adopt Resolution No. B-2360 (February 27, 2024)*
- Policy Report No. 24-07 - *Review Draft of 2023 KDHE Annual Stormwater Report (February 13, 2024)*
- Policy Report No. 23-08 - *Review Draft of 2022 KDHE Annual Stormwater Report (February 14, 2023)*
- Policy Report No. 23-09 - *Review Final Draft of 2022 KDHE Annual Stormwater Report and Adopt Resolution No. B-2328 (February 28, 2023)*
- Resolution No. B-2328 - *Resolution Approving the 2022 KDHE Annual Stormwater Report (February 28, 2023)*
- Policy Report No. 23-14 - *Purchase of Stormwater Truck (March 28, 2023)*
- Policy Report No. 23-48 - *2nd & Chestnut Stone Arch Replacement Change Order No. 1 (November 14, 2023)*

ITEM 4

Topics Required to be Addressed in this Report as Identified in Part V of the Permit

The permittee is well advised to accurately report the conditions and status of their stormwater program and give due consideration to improving or enhancing their program where it is weak, or deficient in any of the core aspects (stormwater management program, six minimum control measures and TMDL best management practices - if applicable - also for Phase I permittees monitoring industrial facilities).

Within the next one or two pages, or perhaps more if so desired, provide comments addressing the following items:

1. Provide the status of compliance with permit conditions, an assessment of the appropriateness of the implemented Best Management Practices, progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP), and the measurable goals with an indication of the progress toward meeting the goals for each of the six minimum control measures.

City of Leavenworth's opinion is that the information shown in each of the "Six Minimum Control Measures" tables support the conclusion that meaningful reduction in discharge of pollutants has occurred. With the global pandemic starting to subside, the City is able to conduct more public meetings. The previous limits on public meetings did impact the Public Education/Outreach as well as the Public Involvement/Participation minimum control measures.

2. Provide results of information collected and analyzed, (for example test results, surveys, or public comments/input) during the annual reporting period. This may include monitoring data used to assess the success of best management practices with respect to reduction in pollutant discharge. Include an interpretation of the information which addresses success or failure of the portion of the program for which the information applies.

The City has collected information on a wide variety of municipal activities associated with various BMPs. This includes data on street sweeping, deicing use (salt), grease trap program, land disturbance permit issuance, SSO reporting and others. There has been no overall "trend" noticed in this data, but it is indicative of the effort of our community to be aware of important issues related to water quality. Specific data for many of these reporting items is in the assessment of the various BMP activities for the last year. It is clear that staff, public, contractors and businesses are aware of the various permitting programs associated with the SMP, and water quality is improved and/or maintained as a result.

3. Provide a summary of the stormwater activities that were undertaken during the previous calendar year and the status of these activities.

The following key programs associated with stormwater activities were conducted in 2023. There are many other smaller programs as well.

- ✓ Building Permits, Fills, Excavations are evaluated for needing an NOI, Land Disturbance Permit, Basic Erosion Control, SWPP and other clean water related elements
- ✓ Projects under construction are inspected and deficiencies brought to the attention of the contractor, owner or other appropriate person
- ✓ City-wide civic effort for "Spring Clean-up"
- ✓ Grease Trap Program inspections and reports
- ✓ Street Sweeping Program
- ✓ Leaf Collection by the Refuse Service and free drop off at the City's brush site
- ✓ Free Drop-Off Recycling Program
- ✓ Household Hazardous Waste Program (Coordinated with Leavenworth County)
- ✓ Free drop-off refuse disposal once per month
- ✓ Maintain "Clean-up your Dog Poop" effort at selected City parks
- ✓ Adopt-A-Park Program to help maintain/clean City parks
- ✓ Aggressive response to SSO calls 24/7
- ✓ Sewer line cleaning and TV program
- ✓ Stormwater articles in City newsletters and brochures placed at City Hall

4. Provide a summary of the stormwater activities which are scheduled to be undertaken during the next calendar year (including an implementation schedule).

All activities as noted in #3 are expected to be continued in 2024. City Staff and Commission will continue to evaluate the measures taken and update any associated BMPs in 2024.

5. Provide a map showing changes in the permittee's Permit Area if the permit area has changed within the year.

There were no changes to the City Limits in 2023.

6. Provide a description of significant changes in any of the BMPs.

There were no significant changes to the BMPs in 2023.

7. Provide copies of any ordinances or resolutions which were updated in the last year and are associated with the SMP.

There were no updates to ordinance or resolution in 2023 associated with the SMP.

8. Provide a list of other parties (such as other municipalities or consultants), which are responsible for implementing any of the program areas of the Stormwater Management Program.

There were no other municipalities or consultants involved with implementing the SMP.

ITEM 5

Six Minimum Control Measures for Municipal Separate Storm Sewer Systems (MS4s) with NPDES Permits

SIX MINIMUM CONTROL MEASURES FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) WITH NPDES PERMITS

The following outlines the NPDES permit requirements for implementation of the Six Minimum Control Measures as required under Kansas MS4 permits issued by the KDHE. The NPDES permit provided to the MS4 authority should be reviewed for additional requirements associated with implementation of the Six Minimum Control Measures such as deadlines for the implementation of the requirements or supplemental requirements associated with the individual measures. The general requirements are as follows:

A. Six Minimum Controls — The permittee shall develop and implement Best Management Practices (BMPs) with measurable goals for each of the six minimum control measures. The six minimum control measures and the associated requirements are listed and explained as follows:

1. Public Education and Outreach

The permittee shall implement a public education program which includes distribution of educational materials to the community or conducting equivalent outreach activities which address the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

2. Public Involvement and Participation

The permittee shall implement a public involvement and participation program to solicit public comment and recommendations regarding the BMPs and measurable goals utilized by the permittee to comply with the permit. The permittee shall comply with state and local public notice requirements when implementing a public involvement and participation program.

3. Illicit Discharge Detection and Elimination

The permittee shall:

- a. Develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4;
- b. Develop a storm sewer system map of the permittee's MS4, showing the location of all outfalls, either pipes or open channel drainage, showing the names and location of all streams or lakes that receive discharges from those outfalls. A copy of the map shall be submitted to KDHE. This map may be submitted as a PDF file(s) on a CD or DVD.
- c. Enact ordinances or resolutions to prohibit non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions if the permittee has such authority. A copy of the ordinances or resolutions shall be submitted to KDHE.
- d. Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste; and

- e. Develop and implement a plan to detect and address prohibited non-stormwater discharges, including but not limited to illegal dumping, to the storm sewer system. Unless identified by either the permittee or KDHE as a significant source of pollutants to waters of the state, the following examples of non-stormwater discharges are not prohibited from entering the MS4:

1. Water line flushing
2. Diverted stream flow
3. Rising groundwaters
4. Uncontaminated groundwater infiltration as defined under 40 CFR 35.2005(20) to separate storm sewers
5. Uncontaminated pumped groundwater
6. Contaminated groundwater if authorized by KDHE and approved by the municipality
7. Discharges from potable water sources
8. Foundation drains
9. Air conditioning condensate
10. Irrigation waters
11. Springs
12. Water from crawl space pumps
13. Footing drains
14. Lawn watering
15. Individual residential car washing
16. Occasional not-for-profit car wash activities
17. Flows from riparian habits and wetlands
18. Dechlorinated swimming pool discharges excluding filter backwash
19. Street wash waters (excluding street sweepings which have been removed from the street)
20. Discharges of flows from firefighting activities
21. Heat pump discharge waters (residential only)
22. Treated wastewater meeting requirements of a NPDES permit
23. Sump pump drains
24. Other discharges determined not to be a significant source of pollutants to waters of the state, a public health hazard, or a nuisance

4. Construction Site Stormwater Runoff Control

The permittee shall develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must include the development and implementation, at a minimum, of the following:

- a. Permittees which have the authority to enact ordinances or resolutions shall enact such ordinances or resolutions to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and Local law;
- b. Requirements for construction site owners or operators to implement appropriate erosion and sediment control best management practices;
- c. Requirements for construction site owners or operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that are likely to cause adverse impacts to water quality;
- d. Procedures for site plan review which incorporate consideration of potential water quality impacts;
- e. Procedures for receipt and consideration of information submitted by the public;
- f. Procedures for site inspection and enforcement of control measures.

5. Post-Construction Stormwater Management in New Development and Redevelopment Projects

The permittee shall develop, implement, and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development and implementation, at a minimum of the following:

- a. BMPs to prevent or minimize adverse water quality impacts;
- b. Strategies which include a combination of structural and/or non-structural BMPs appropriate for the municipality;
- c. For permittees which have the authority, ordinances or resolutions to address post-construction runoff from new development and redevelopment projects to the extent allowable under State and local law;
- d. Ensure adequate long-term operation and maintenance of BMPs

6. Pollution Prevention/Good Housekeeping for Municipal Operations

The permittee shall develop and implement an operation and maintenance program that includes employee training to prevent and reduce stormwater pollution from municipal operations activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

B. Stormwater Management Program

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the Stormwater Management Program (SMP) been developed and implemented?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has the SMP been modified or updated during this reporting period?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If the answer to question 2 above was "yes," has the modified SMP been submitted to KDHE for review?

If the answer to item 3 is a "NO," a copy of the updated SMP must be submitted with this annual report. If it is anticipated a measurable goal cannot be met in the next year the SMP should be modified and submitted to KDHE for review. The modifications may include different BMPs and/or revised goals to avoid being in a position of non-compliance. However; reasonable BMPs with reasonable goals must be implemented or KDHE may require the permittee to modify the SMP to include additional or better BMPs and/or more reasonable goals.

C. Total Maximum Daily Load (TMDL) Best Management Practices(BMPs)

Some permittees are required to implement BMPs to reduce the discharge of listed TMDL regulated pollutants (potentially any or all of the following pollutants – bacteria, nutrients, and sediment)

Please place an "X" in the left boxes to complete the table below.


YES	NO	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Were any BMPs intended to attenuate the discharge of TMDL regulated pollutants implemented? See your permit to determine if TMDL regulated pollutants are listed for the receiving stream affected by your stormwater system (TMDL Table).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	List all of the BMPs intended to attenuate the discharge of TMDL regulated pollutants as identified in the SMP and provide the requested information in the following table.

List all the TMDL BMPs as identified in the SMP and provide the requested information in the following table.

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D. TMDL BMP Table

The BMPs listed in the below table should add up to a minimum of 6 points.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
TOTAL POINTS CLAIMED FOR TMDL 				

City Not Required to Report

E. Stormwater Management Program Requirements (Six Minimum Control Measures)

1. Public Education and Outreach (Table)

List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table. The BMPs listed in the below table should add up to a minimum of 7 points.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
ED & 0 - 01	Maintain a stormwater webpage for the permittee.	Stormwater webpage - https://www.leavenworthks.org/citymanager/page/stormwater-projects	2
ED & 0 - 02	Distribute educational materials (either flyers, brochures, catalog mailings, handouts, or e-mails) addressing various pertinent stormwater public education topics.	Flyers and educational materials are available on the City's website and in City Hall.	2
ED & 0 - 03	Provide either training or educational materials to permittee-identified businesses at high risk of contributing to stormwater pollution.	Stormwater Education Brochures - https://www.leavenworthks.org/publicworks/page/public-education-brochures	2
ED & 0 - 04	Apply notification, placard, covers/hatches with message, or stencil, on stormwater inlets to provide a message similar to "No Dumping – Drains to River" Apply this notification on at least 10% of all known stormwater inlets in the MS4.	All new storm structures have the message, "Drains to Stream". City applies the message to older structures. There are a total of 298 stamps/stencils. Example can be found at: https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents	2
ED & 0 - 05	Post the municipality's MS4 permit and SMP document on either the stormwater webpage or the municipal webpage.	SMP - https://www.leavenworthks.org/publicworks/page/engineering MS4 Permit - https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents	1
ED & 0 - 12	Create a stormwater information brochure to provide to the public at public meetings and/or hearings.	Stormwater-related brochures can be found at: https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents	1
ED & 0 - 15	Hold a social media campaign addressing various pertinent stormwater public education topics.	There were 10 social media posts related to public education about improving, reducing or listing the dangers of polluting the City's stormwater system.	2
TOTAL POINTS CLAIMED FOR PUBLIC EDUCATION AND OUTREACH →			12

E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)

2. Public Involvement and Participation (Table)

List all public involvement and participation BMPs as identified in the SMP and provide the requested information in the following table. The BMPs listed in the below table should add up to a minimum of 6 points.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
P I/P - 01	Hold a public hearing or public forum to notify the public about stormwater program activities and to solicit public comments regarding stormwater issues.	<p>City Commission reviewed KDHE annual stormwater reports on February 13 and 27, 2024. The meetings were also broadcast on the City's channel cable TV station and YouTube.</p> <p>City Commission reviewed stormwater projects for CIP in 2024, and approved design and construction of several projects. List and stormwater-related documents are at: https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents</p>	2
P I/P - 03	Hold park or stream bank clean-up events for public volunteers to aid municipal staff in removing trash, debris, or pollutant sources from the selected clean-up area.	City-wide Spring Cleanup - April 22, 2023. Services offered to residents include open Brush Site, Recycling Center, large-item drop off and electronics recycling. City coordinated with Leavenworth County and a special event to dispose of HHW was held at the City Municipal Center also in April, 2023.	3
P I/P - 05	Provide at least two events for residents to engage in cleanup activities and improve water quality in the municipality.	The City has a "Three-Mile Creek" monthly clean-up program (March through November) in which citizens pick up trash. In 2023 there were nine citizen groups that participated.	3
TOTAL POINTS CLAIMED FOR PUBLIC INVOLVEMENT AND PARTICIPATION →			8

D. SMP Requirements (Six Minimum Control Measures) (Continued)

1. Illicit Discharge Detection and Elimination

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?</p> <p>If yes, describe the plan below: The City created a phone number (913) 682-1090 for anyone who sees or feels that an illicit discharge is or has occurred. City will inspect and work to determine if an illicit discharge has occurred and the source of the discharge. Reporting information can also be found at: https://www.leavenworthks.org/publicworks/page/water-pollution-control</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a map of the MS4 been developed, showing the location of all outfalls, either pipes or open channel drainage, showing names and location of all streams or lakes receiving discharges from the outfalls? If yes, attach map.</p> <p>Map can be found at: https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The permit may require the permittee enact ordinances, or resolutions. Have ordinances, or resolutions, or regulations to prohibit non-stormwater discharges into the storm sewer system been enacted?</p> <p>If yes, list ordinances/resolutions and their effective dates below: Ordinance No. 8201 was adopted on December 16, 2022, and enforcement began in 2023.</p> <p>Ordinance No. 8201 - Amending Division 5, Chapter 46, Regulating and Permitting the Operation of Facilities Producing Grease-Laden Waste and Service Providers for Grease Interception Devices</p>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Have the ordinances, resolutions, or regulations been modified?</p> <p>If yes, list ordinances/resolutions and their effective dates below:</p>

List all the Illicit Discharge Detection and Elimination BMPs as identified in the SMP and provide the requested information in the following table

E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)**3. Illicit Discharge Detection and Elimination (Table)**

List all illicit discharge detection and elimination BMPs as identified in the SMP and provide the requested information in the following table. The BMPs listed in the below table should add up to a minimum of 7 points.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
I D D & E - 04	Implement a program to evaluate MS4 outfalls to identify illicit discharges.	The City's stormwater map identifies MS4 outfalls. If residents identify concerns regarding illicit discharges, they are forwarded to Water Pollution Control for evaluation and possible action. The City did not meet the threshold in 2023 to acquire the point.	
I D D & E - 06	Inspect, by televising pipelines or direct visualization of open channel drainage, 2% of the MS4 system within the permit area all conducted within a 12-month period to aid in identifying illicit discharges as well as evaluate the condition of the storm sewer lines/drainage channels-ditches.	The City visually inspected open channels and televised storm lines across the City. Televising lines was done by Water Pollution Control staff while open channels/ditch lines were inspected by our dedicated Stormwater staff at our Municipal Service Center.	3
I D D & E - 07	Implement a Household Hazardous Waste Collection Program (HHWCP) or document others who have implemented such a program to provide such service to all property owners or residents located within the permit area.	Leavenworth County provides HHW services throughout the year and a special event to dispose of HHW was held at the Municipal Service Center in the spring, 2023.	3
I D D & E - 08	Implement a program to increase the reliability of sanitary sewer pump stations above the minimum standard design requirements.	In 2023, the City upgraded all of our lift stations. We meet all the requirements of this BMP except we do not have an on-site dedicated backup generator at each location. We have a mobile one dedicated to lift stations (just not on-site at each location). Not taking these points.	
I D D & E - 09	Provide a contribution to area recycle programs or programs (such as household hazardous waste disposal facilities, e-cycle facilities, paper shred facilities, pharmaceutical disposal facilities etc.) designed to properly dispose of types of waste or materials which have previously been discarded to or adjacent to either the MS4, streams, or lakes within or adjacent to the permittee's permit area.	The City has a recycling center (free to the City of Leavenworth residents) that accepts the following items: tin and aluminum cans, car batteries and rechargeable batters, e-waste, used automotive oil, plastics, to name a few. A complete list can be found at: https://www.leavenworthks.org/publicworks/page/leavenworth-recycling-center	2

BMP ID NUMBER	BRIEF BMP DESCRIPTION	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
I D D & E - 10	Inspect 5% of the MS4 system Stormwater inlets and/or outfalls within the permit area all conducted within a 12-month period to aid in identifying illicit discharges. 3 points may be claimed for inspection of 2% of the MS4 system in the year the required percentage of inlets and/or outfalls are finally inspected, alternately if 15% of the MS4 system is inspected 5 points may be claimed.	Stormwater crew inspected and/or maintained approximately 770 inlets and area drains, and other stormwater facilities. Number inlets cleaned - 1,472	3
TOTAL POINTS CLAIMED FOR ILLICIT DISCHARGE DETECTION AND ELIMINATION →			11

E. SMP Requirements (Six Minimum Control Measures) (Continued)

2. Construction Site Stormwater Runoff Control

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development/redevelopment projects been enacted?</p> <p>If yes, list ordinances/resolutions and their effective dates below: Review Stormwater Management Land Disturbance Permits - December 6, 2016</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?</p> <p>If yes, describe plan below: In 2015 City staff implemented the requirement to obtain a Land Disturbance Permit (LDP) for any construction activity within the City. More information can be found at: https://www.leavenworthks.org/publicworks/page/land-disturbance-and-excavation</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a procedure or program been developed requiring construction site owners and/or operators to control waste such as discarded building materials, concrete truck washout, chemicals, paint, litter, and sanitary waste at construction sites likely to cause adverse impacts to water quality?</p> <p>If yes, describe procedure/program below: Please see number three above.</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a procedure been developed and implemented requiring site plan review which includes consideration of potential water quality impacts?</p> <p>If yes, describe procedure below: Section IX of the City's Manual of Infrastructure Standards (adopted in October of 2020) requires all commercial developments, subdivision developments and individual lots to meet current Stormwater Design Guidelines or APWA Section 5600, Storm Drainage Systems and Facilities. The 'manual' also states they shall provide adequate temporary and permanent erosion control measures in accordance with the City's Land Disturbance Permits and Regulations.</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a procedure been developed for the receipt and consideration of information submitted by the public?</p> <p>If yes, describe procedure below: Staff welcomes public input on proposed development whether the item goes before a regulatory body or not. Anytime a development goes before the Planning Commission and/or the City Commission, the procedure is to allow public comment during those meetings.</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a procedure been developed and implemented for construction site inspection and enforcement of the control measures?</p> <p>If yes, describe procedure below: Please see number three above.</p>

List all the construction site stormwater runoff control BMPs as identified in the SMP and provide the requested information in the following table

E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)

4. Construction Site Stormwater Runoff Control (Table)

List all construction site stormwater runoff control BMPs as identified in the SMP and provide the requested information in the following table. The BMPs listed in the below table should add up to a minimum of 6 points.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
CSSRC - 01	Implement a requirement for a Soil Erosion and Sediment Control (SESC) Plan for any land disturbance sites which are either equal to or greater than one acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	The City requires a land disturbance permit (LDP) for any land disturbance. This includes submittal of a plan identifying all needed erosion control measures. Examples of residential and commercial LDPs can be found at: https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents	2
CSSRC - 02	Develop and adopt a design manual for erosion and sediment control BMPs which are required to be used on sites which will be disturbed and are either equal to or greater than one acre, or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more.	The City follows MARC erosion control BMPs. Examples can be found at: https://www.leavenworthks.org/publicworks/page/stormwater-informational-brochures-and-flyers-0	2
CSSRC - 04	Develop a site plan review process which considers potential water quality impacts which may occur during construction as well as post construction impacts.	The City reviews every site plan for both water quantity and water quality. Building permits are not issued until water quality is addressed.	2
CSSRC - 07	Acquire or develop a software tracking system to track inspections and related tasks.	The City uses MUNIS to track and schedule inspections.	1
TOTAL POINTS CLAIMED FOR CONSTRUCTION SITE STORMWATER RUNOFF CONTROL →			7

E. SMP Requirements (Six Minimum Control Measures) (Continued)

3. Post-Construction Site Stormwater Management in New Development and Redevelopment

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>The permit requires the permittee, if they have such authority, to enact ordinances or resolutions. Have ordinances or resolutions to address construction site runoff from new development and redevelopment projects been enacted?</p> <p>If yes, list ordinances/resolutions and their effective dates below: In December, 2016, City staff implemented the requirement to obtain a Land Disturbance Permit (LDP) for any construction activity within the City. Ordinance No. 8021 can be found at:</p> <p>https://www.leavenworthks.org/publicworks/page/land-disturbance-and-excavation</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Has a post-construction stormwater runoff program been implemented?</p> <p>If yes, describe the program below: The City implemented an inspection program on our post-construction stormwater improvements. This includes inspections of both private and publicly maintained basins as well as several hydrodynamic separators that have been installed on recent projects.</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have post-construction sites been inspected?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are BMPs specified to minimize adverse water quality impacts?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Have strategies been developed to include a combination of structural and/or non-structural BMP appropriate for the municipality?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Have measures been implemented to ensure adequate long-term operation and maintenance of structural BMPs?</p> <p>If yes, describe measures below: See number three above. Inspection and any needed repairs and maintenance of the post-construction measures helps ensure the long-term operations of these items.</p>

List all the post-construction site stormwater management in new development and redevelopment BMPs as identified in the SMP and provide the requested information in the following table.

E. Stormwater Management Program Requirements (Six Minimum Control Measures) (CONTINUED)**5. Post-Construction Stormwater Management (Table)**

List all post-construction stormwater management BMPs as identified in the SMP and provide the requested information in the following table. The BMPs listed in the below table should add up to a minimum of 7 points.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)	POINTS CLAIMED
P-C SM - 01	Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and re-development construction sites which are greater than one acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more. (Points shown reflect adopting existing APWA/MARC manuals.)	Link to APWA/MARC manuals posted at City's website: https://www.leavenworthks.org/publicworks/page/public-education-brochures Link to the City of Leavenworth Manual of Infrastructure Standards: https://www.leavenworthks.org/publicworks/page/designs-studies-reports	3
P-C SM - 02	Develop a list of post-construction structural or non-structural BMPs which are required to be incorporated in any development/re-development project. The list must include guidance regarding the BMPs which must be incorporated in various projects as determined appropriate by the permittee. The list is to be provided to entities involved with the design of project prior to site plan review by the permittee.	The City requires that water quality impacts be addressed for development activities. Water quality BMPs may consist of rain gardens, bio-swales, basins that detain runoff until silt/pollutant settle out or other approved BMPs. In areas where there is insufficient space for larger BMPs, hydrodynamic separators are being utilized.	2
P-C SM - 03	Develop and implement a program to ensure adequate long-term cleaning, operation and maintenance of all municipally-owned or operated post-construction structural stormwater BMP facilities.	The City has a software maintenance program that identifies and schedules inspections.	2
P-C SM - 05	Develop and implement a program for inspection of permittee-owned structural BMPs which includes implementation of needed maintenance to ensure long-term operation of the BMPs.	The City inspected City-owned structural BMPs at random times and after significant storm events. These BMPs mostly consist of hydrodynamic separators (Thornton and Eisenhower) and 'beehive' grates. No points taken.	
P-C SM - 06	Develop and implement a program for inspection of known privately-owned structural BMPs which includes providing the owner of the BMPs an inspection report which specifies needed maintenance to ensure long-term operation of the BMPs.	Due to personnel changes, a Detention Public Meeting was not held. Staff did inspect the majority of the privately owned basins in 2023 and we are creating a rotating inspection schedule for all of these basins. No points taken.	
TOTAL POINTS CLAIMED FOR POST-CONSTRUCTION STORMWATER MANAGEMENT →			7

E. SMP Requirements (Six Minimum Control Measures) (Continued)

4. Municipal Pollution Prevention/Housekeeping

Please place an "X" in the left boxes to complete the table below.

YES	NO	N/A	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The permit requires the permittee to enact a program to address pollution prevention/good housekeeping for Municipal Operations. Has such a program been enacted?
			<p>If yes, describe program below:</p> <p>The City's Municipal Operations (our Municipal Service Center [MSC]) maintains a supply of materials that are used to absorb oil and fuel leaks or spills. These are then disposed of at approved facilities. Vehicle washing no longer occurs at the MSC, but at local car wash locations to help prevent debris and oil/fluids from washing into waterways or through the ground at the MSC. We also maintain an oil separator for our service garage that captures any spills inside the facility.</p>

List all the municipal pollution prevention/housekeeping BMPs as identified in the SMP and provide the requested information in the following table.

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ITEM 5

Six Minimum Control Measures (Supporting Documentation)

BMP 1 & 2 - Public Education & Outreach and Public Involvement & Participation

Public Information

- City Newsletter Stormwater-Related Articles
 - a. Legacy Tree Program
 - b. 2023 Spring Cleanup Flyer and Documents

- Stormwater Pollution Prevention Informational Brochures which can be found at: (examples attached)

<https://www.leavenworthks.org/publicworks/page/stormwater-informational-brochures-and-flyers-0>

- a. Winter Time - ECO-Friendly Ice Melts
- b. Only Rain Down the Storm Drain
- c. Reducing Stormwater Pollution this Winter
- d. Clean Water Starts with YOU

Parks

Leavenworth Parks and Recreation Department
Administrative Office
123 S. Esplanade Street
Leavenworth, Kansas 66048
(913) 651-2203
Office Hours: Monday-Friday, 8 a.m. – 5 p.m.

There are more than 20 parks consisting of 424 acres with 11 shelters, 14 playgrounds, 8 tennis courts, 12 baseball/softball fields, 16 practice soccer fields, 12 game soccer fields (U6-U14), 7 restroom buildings, 77 flower beds, pickle ball courts, batting cages, a splash pad, an aquatic center, an outdoor basketball court, a disc golf course, a skate park, a dog park, a campground and several miles of walking trails.

Park Programs

Legacy Trees - The Legacy Tree Program makes it possible to help preserve the rich history of trees in our parks while commemorating either a person or event. Through this program, old trees are replaced and new areas rejuvenated. All contributions to this program are placed in a Park Special Gift Fund and are only used for the planting of Legacy trees. This program is available for online registration and payment through our website at www.leavenworthks.org/parksrec.

Memorial Benches - Another way to honor a person or recognize an organization is through the purchase of a memorial bench with an attached plaque in Ray Miller Park, Landing Park, or Waggin' Tails Dog Park. The Parks and Recreation Department will install the bench. Cost varies. Email parksandrec@firstcity.org for more information, or find the application form online at www.leavenworthks.org.

Adopt-A-Park – Looking for a way to make a difference



Stubby Park and Bob Dougherty Park hills make for great sledding as the weather allows. See locations on Parks Amenities Chart on page 9.



A new section of trail was added to the western portion of Havens Park in 2022. In 2023, staff plan to add onto this portion of trail and construct new bathrooms near the entrance to the park.

in our community? Consider adopting a Leavenworth city park or other landscaped public area. City staff will provide guidance and some materials for projects. See which parks are available and register through our website at www.leavenworthks.org/parksrec.

Rentals

Shelters - We have 11 shelters available for rent at 7 of our parks. See our chart for parks and amenities. You can reserve and pay for these online through Eventbrite (convenience fees apply). Visit our website at www.leavenworthks.org/parksrec for details and the link to online payment.

Leavenworth Landing Park - This scenic park on the Missouri River located by the Riverfront Community Center is available to rent for special occasions. Permit fees start at \$15/hour with a \$100 refundable damage deposit. Choose the Paddlewheel Plaza or the Railroad Roundhouse close to the front entrance of the park. For more details, go to www.leavenworthks.org/parksrec or email parksandrec@firstcity.org.

Haymarket Square - An event venue located at 649 Cherokee. The open-air pavilion is available for rental when not occupied by the Farmer's Market or the City Market. Contact the City Clerk's office at 913-682-9201 for availability and more information. If planning a special event open to the public, other requirements must be met to reserve the square.

Figures from 2022 show 18% drop in overall crime in the City of Leavenworth

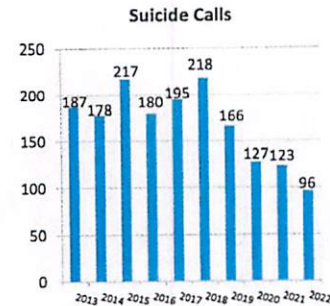
Police Chief Pat Kitchens presented the 2022 Annual Report for the Leavenworth Police Department to the City Commission in March.

Among some of the highlights include:

- 18% drop in overall crime in Leavenworth.
 - There has been a drastic reduction of suicide calls in the last five years. (See chart.) Kitchens noted that this is one of the most difficult and dangerous calls to which police officers respond.
 - 2022 marked the fifth year in a row of crime dropping significantly.
 - A total of 20,641 reports were taken in 2022, out of this 3,489 reports were taken.
 - Part 1 crimes, identified as murder, rape, robbery, assault, theft or auto theft, reduced 5.5% from the previous year. There were 1,494 reported Part 1 crimes in 2022.
 - There were 449 reported domestic disturbance cases in 2022. This has mostly reduced in recent years since the re-opening of the Alliance Against Family Violence, a local shelter available for women and children of domestic violence.
 - In 2022 there were 494 traffic accidents reported to police. Out of those, 118 were injury accidents and 21 were alcohol related.
 - Professional standards investigations are reports made against police officers. They are investigated by Deputy Police Chief Dan Nicodemus. In 2022 there were 7 professional standards investigations.
- Kitchens also mentioned that although the statistics show positive crime trends, retention and professional growth, how citizens feel about their safety is also relevant.

Mental Health

In the last several years the issue of mental health has risen to one of the more difficult and dangerous calls that police officers deal with.



Suicide calls to the Leavenworth Police Department have fallen significantly in the last few years. A new number, "988" is now available nationwide to help people in a crisis 24 hours a day, 7 days a week.

"As much data as we have, and some of it is very positive, that's not the only thing that's important to us," he told commissioners. "Equally as important to the data we have is how people feel about the community." In March, the police department began a new license-plate recognition system that will have 19 cameras throughout the City. It does not have speed radar and will not aid in traffic stops, but Chief Kitchens says the license plate camera recognition will allow law enforcement to track specific license plate numbers associated with a crime. The cameras will be stationary at some of Leavenworth's busiest intersections to help track potential criminal activity leaving and entering the community.

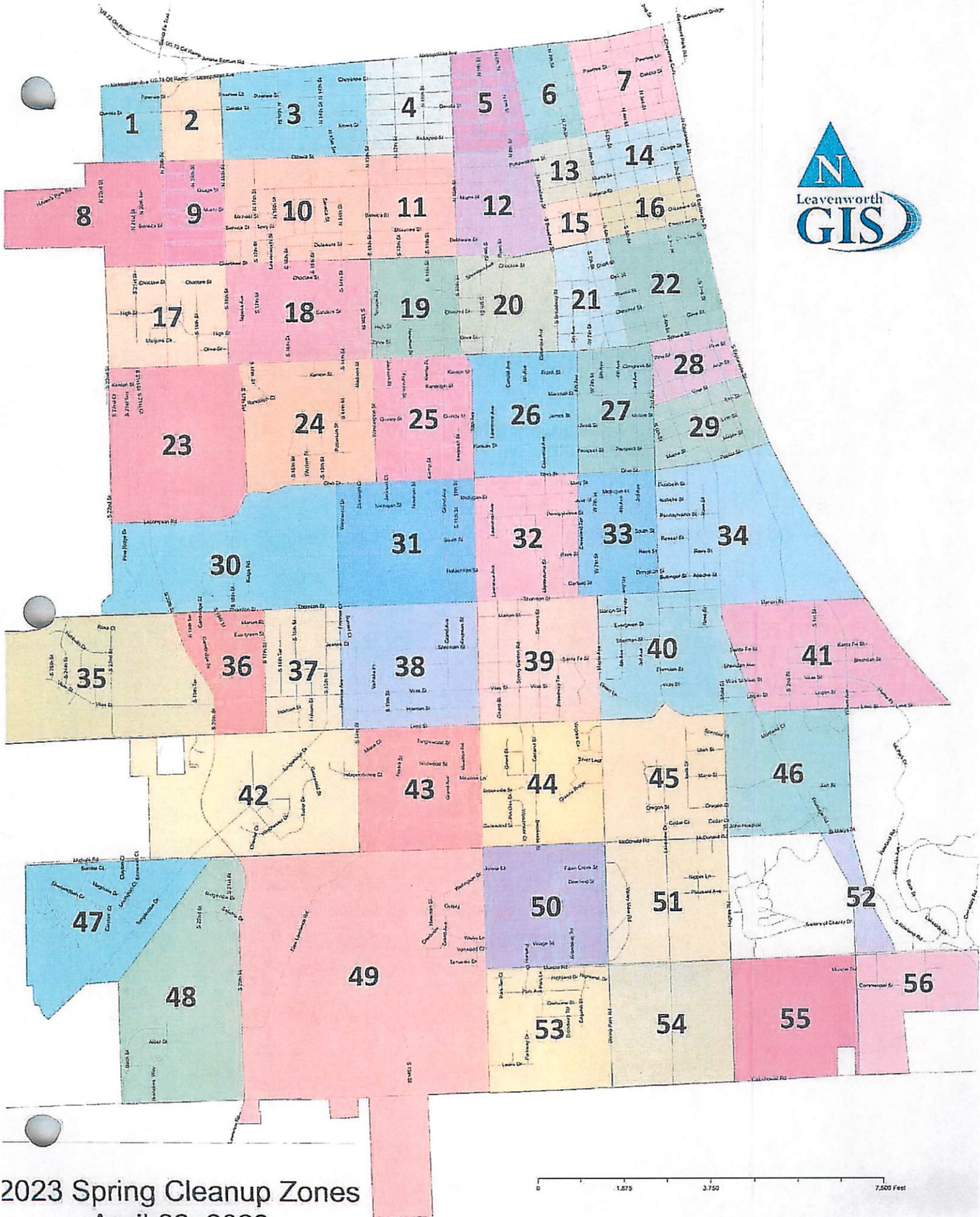
Citywide Spring Cleanup scheduled for Saturday, April 22



Each spring, hundreds of Leavenworth community members gather to remove trash throughout city streets in one day. This year's event coincides with Earth Day -- Saturday, April 22. The kick-off event begins 8:30 a.m. at Warren Educational Campus, 3501 New Lawrence Road, in the cafeteria. Volunteers who sign up by April 5 will receive a free t-shirt. All volunteers will get a one-day pass to Wollman Aquatic Center. A sign-up sheet is available on the City's website for volunteer team leaders to share with their civic groups, scouts, church groups, nonprofit organization, business, military group or individual or family group. Volunteer groups will be responsible for picking up trash in a grid on

the City of Leavenworth map. The City of Leavenworth will provide gloves and trash bags. Contact Melissa Bower, Public Information Officer, for more information about volunteering, melissab@firstcity.org or 913-680-2610. For those who don't wish to volunteer, there are many other services. We encourage residents to take advantage of these disposal times at no additional cost:

- Recycling Center, Pennsylvania and Lawrence Avenues, will be open 8 a.m. to 2 p.m. Saturday April 22.
- Large Item Trash drop off, Pennsylvania and Lawrence Avenues, will be open 8 a.m. to 2 p.m. Saturday April 22. This includes items like furniture, tires, scrap metal, appliances, or anything else weighing more than 60 pounds.
- Household Hazardous Waste disposal will be available 9 a.m. to noon at Pennsylvania and Lawrence Avenues. This is for residents to dispose of items that should not go down the drain, such as paint, paint thinners, solvents, oil/gas mixtures, automobile fluids, herbicides and pesticides.
- Paper Shredding 10 a.m. to 12:45 p.m. at Citizens Federal Savings Bank, 5151 S. Fourth Street and 1 - 2 p.m. at Citizens Federal Savings Bank, 312 S. Fifth St. Saturday April 22.
- The Brush Site, 1803 S. Second St., is open 8 a.m. to 4 p.m. Saturday April 22. The Brush Site is a place for Leavenworth residents to dispose of yard waste, branches, leaves, or other organic materials.



2023 Spring Cleanup Zones
April 22, 2023

WINTER TIME!

WHAT CAN BE USED INSTEAD OF SALT?

4

ECO-FRIENDLY ICE MELTS

FIREPLACE ASHES work to create traction with ice melting effects. Wood ash contains potash (potassium salts) which will help de-ice and melt snow in moderate conditions.

HOMEMADE DE-ICER can be made with ingredients you might have in your house. All you need is:

- ◆ A bucket
- ◆ Six drops of dish soap
- ◆ Half-gallon of hot water
- ◆ ¼ cup of rubbing alcohol

Combine all of the ingredients in the bucket. Once you pour the homemade ice melt mixture onto your sidewalk or driveway, the snow and ice will begin to bubble up and melt. Just keep a shovel handy to scrape away any leftover pieces of ice.

ALFALFA MEAL ICE MELT is commonly used as fertilizer. It contains nitrogen, but not enough to risk harm to plants or your local water system. Alfalfa meal has a dry, grainy texture that provides traction while it goes to work melting snow and ice. Bags of alfalfa can be purchased at most gardening stores.

SUGAR BEET JUICE on its own or diluted in salt solution can lower the freezing point of water, and help to deice slippery roads, driveways and sidewalks. The odorless and virtually colorless substance is completely harmless to humans, animals, plants, cars, fabrics, and water systems. But you can't open a jar of beets and pour it on your driveway to get the same results. It has to be purchased from office suppliers, garden centers or online.

Please note that in extreme cold weather, both salt and eco-friendly ice melts tend to lose their effectiveness. Always use caution when walking or driving when snow and/or ice might be present.

ONLY RAIN DOWN THE STORM DRAIN

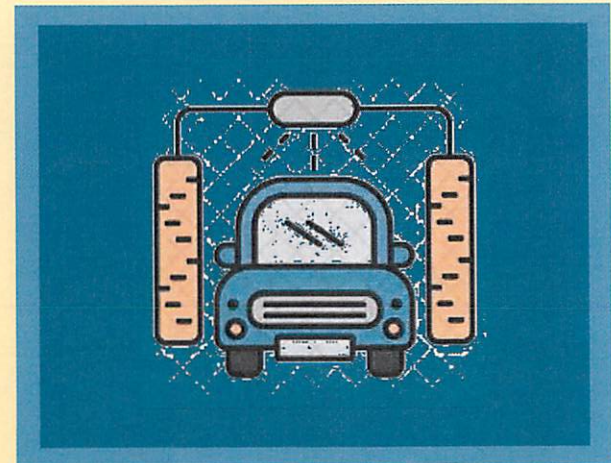


DID YOU KNOW?

Soapy runoff from washing your car can harm creek life even if biodegradable soaps are used.

DID YOU KNOW?

Wash your car on gravel or grass, or use a commercial car wash.



City of Leavenworth, Kansas

Reducing Pollution this Winter

What you can do to prevent stormwater pollution on your property

- ❖ Shovel as soon as possible after a snowstorm. As a result, less ice will form and you won't need as much salt or de-icer.
- ❖ Use safe and effective alternatives to salt. Remember that salt is not effective below 15°F. Sand or kitty litter will give you traction when it's too cold for salt.
- ❖ Plant native species, that are salt tolerant, near paved areas. Not only will these species be able to survive despite the road salt, they will also act as a protective buffer for local waterways.
- ❖ Make sure the storm drains closest to your property are clear of snow and other debris. Do not shovel snow into storm drains since they empty directly into local creeks.





**CITY OF
LEAVENWORTH, KANSAS
WASTEWATER TREATMENT
PLANT**

**ONLY RAIN
DOWN THE DRAIN**

When it rains, runoff carries pollutants into streams and water supplies.

To keep our water clean, make sure only rain goes down storm drains.

CLEAN WATER STARTS WITH YOU

PICK UP

Trash



Yard clippings and leaves



Pet Waste



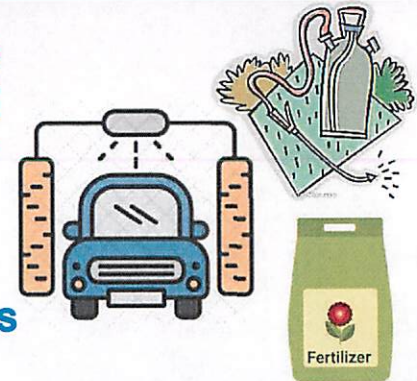
DISPOSE OF

Used motor oil and paint at a waste disposal center



CHOOSE

A runoff-free carwash and non-toxic or organic fertilizer and pesticides



ITEM 5

Six Minimum Control Measures (Supporting Documentation)

BMP 3 - Illicit Discharge Detection and Elimination

- Employee Training link is:

<https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents>

- Grease Prevention Program Summary
- Ordinance 8201 Grease Trap, December 13, 2022 can be found at:

<https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents>

- Municipal Service Center Household Hazardous Waste Cleanup Data
- Maps Showing Stormwater System and Outfalls

City of Leavenworth Grease Prevention Program 2023 Summary

February 9, 2024

The City of Leavenworth's Building Inspections Office continues to oversee a grease trap/interceptor inspection and maintenance program as part of the effort to prevent backups in the sewer lines. This effort expects to reduce the number of instances where the contents of the sanitary sewer overflow into homes, yards, or streets.

The City of Leavenworth's grease trap/interceptor program and ordinances were updated in the beginning of 2023. This new program now requires businesses to obtain an annual grease trap/interceptor license. An annual inspection (performed by a licensed plumber with the City of Leavenworth) and copies of maintenance records for the previous year will be required before the licenses can be issued/renewed. The program also has fines in place for businesses operating the devices without a license and not maintaining the devices in proper working conditions. Establishments that require a grease trap/interceptor will be sent a renewal notice every year for their licenses.

The ongoing efforts include the following general activity:

1. Contact the property owners and/or tenants whose buildings require a grease trap/interceptor with a letter informing them that the devices are required and that the devices require routine maintenance to operate properly.
2. Requires plumbing contractors licensed by the City of Leavenworth to perform yearly routine inspections of the grease traps/interceptors to ensure they are installed and maintained correctly.
3. Grease trap/interceptors maintenance and yearly cleaning reports will need to be submitted yearly upon renewal of annual grease trap/interceptors licenses.

Utilizing records from 2023, there were 117 businesses identified in 2023 that staff believed may require a grease trap/interceptor. A letter along with a packet of information including a copy of the new grease trap/interceptor ordinance that was sent out to these businesses in March with the requirement that they needed to have their license by the end of April. It was determined that out of these 117 businesses only 82 of them needed grease trap/interceptors.

- 52 out of the 82 businesses have gotten their grease trap/interceptor license
- 1 out of the 82 businesses were issued a variance
- 1 out of the 82 businesses are closed
- 28 out of the 82 businesses have not gotten their grease trap/interceptor license

As other establishments are built or identified as needing to have a grease trap/interceptor, the establishment will be added to the program's records.

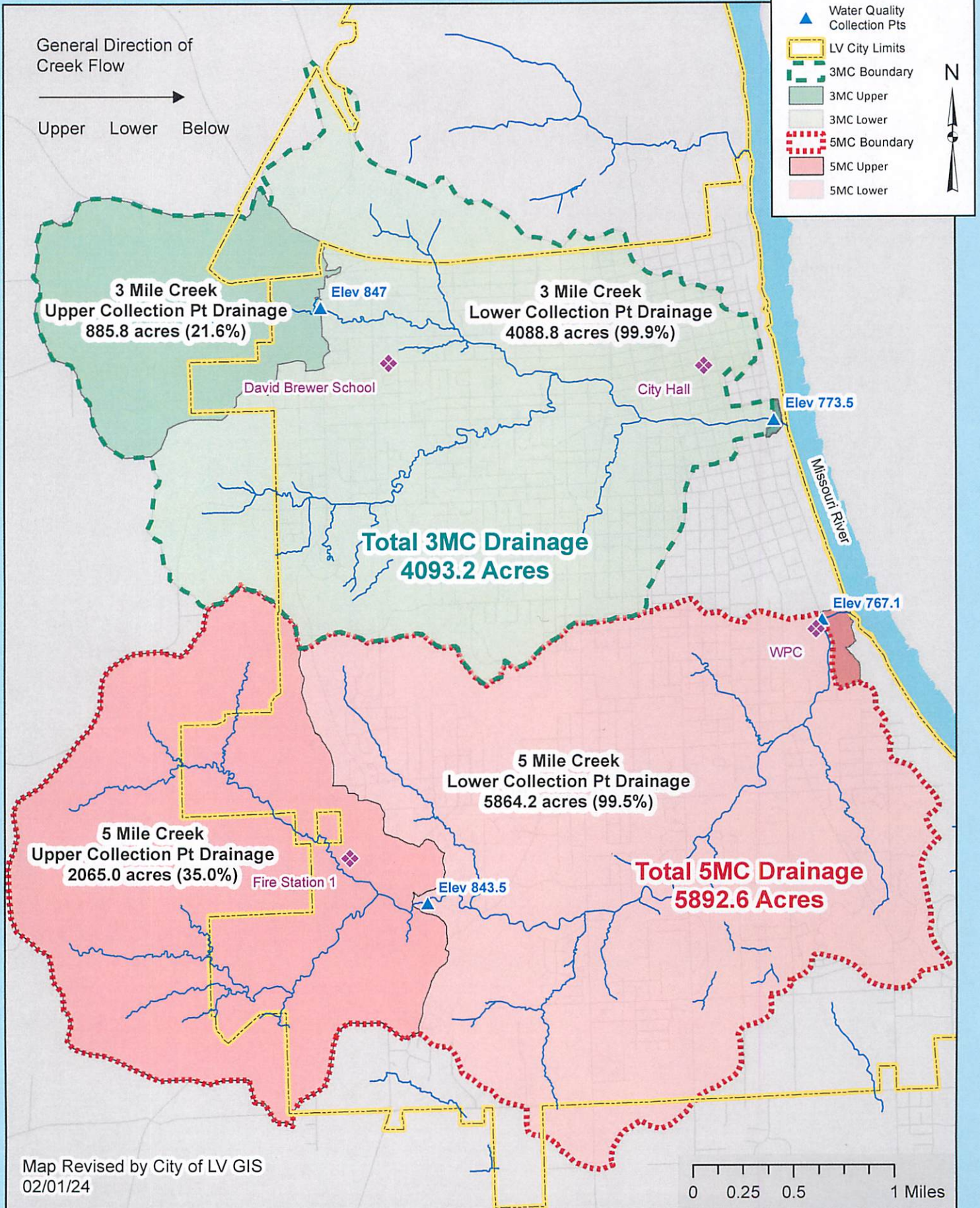
City of Leavenworth 2023 Household Hazardous Waste Clean Up

Household Hazardous Waste Participation by Materials	
Item	Weight (Pounds)
Latex Paint	2,544
Oil Base Paint	108
Flammable Liquids	256
Poisons	224
Corrosives	32
Aerosols	60
Antifreeze	180
Car Battery	3,404
Total	

Customers Serviced - 37

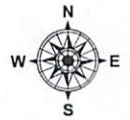
City of Leavenworth, KS

Stormwater Management Data Collection



Leavenworth Kansas Stormwater Map with Creek Basins

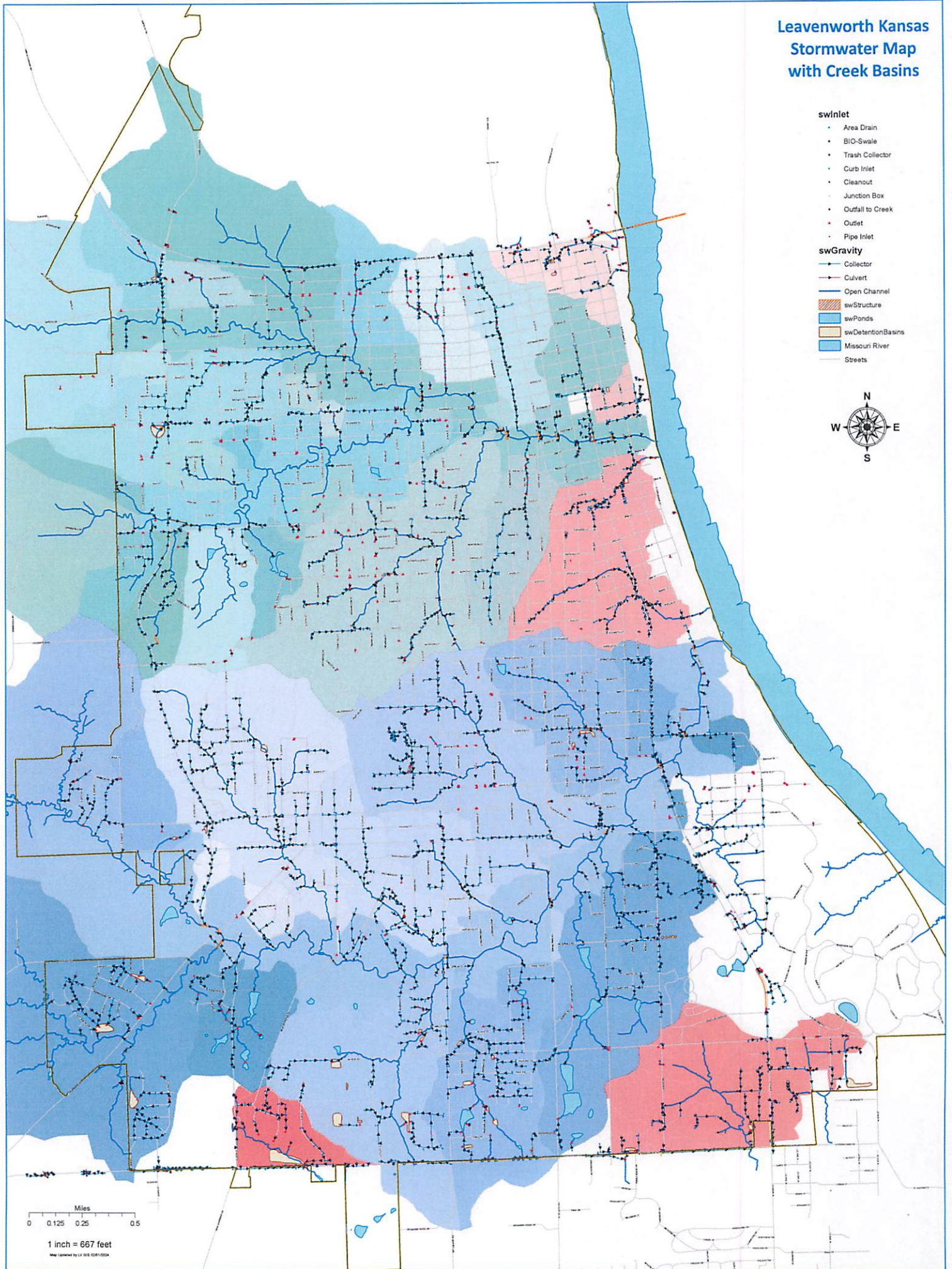
- swInlet**
 - Area Drain
 - BIO-Swale
 - Trash Collector
 - Curb Inlet
 - Cleanout
 - Junction Box
 - Outfall to Creek
 - Outlet
 - Pipe Inlet
- swGravity**
 - Collector
 - Culvert
 - Open Channel
 - ▨ swStructure
 - swPonds
 - swDetentionBasins
 - Missouri River
 - Streets



Miles
0 0.125 0.25 0.5

1 inch = 667 feet

Map prepared by U.S. GIS (2011/2014)



ITEM 5

Six Minimum Control Measures (Supporting Documentation)

BMP 4 - Construction Site Stormwater Runoff Control

- Erosion and Sediment Control Inspection Report Form
- Land Disturbance Permit (LDP) Applications. Examples of Commercial and Residential LDPs can be found at:

<https://www.leavenworthks.org/publicworks/page/2023-kdhe-annual-stormwater-report-supporting-documents>

Erosion and Sediment Control Inspection Report Form		
Project Name and Location <u>PMP #3</u>		
Weather: <u>Rain</u>	Pollution Control Measures (BMP) Checklist: <input type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)	
Rain in last 24 hrs (inches): <u>.50</u>		
Owner / Permittee: <u>BAKER CONST.</u>		
A. Current Construction / Active Areas: <u>EAST SIDE CITY HALL PARKING</u>		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. <u>none</u>		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

9-29-23
Date of
Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
• Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

ITEM 5

Six Minimum Control Measures (Supporting Documentation)

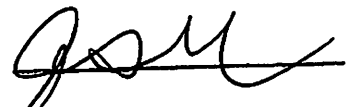
BMP 5 - Post-Construction Site Stormwater Management in New Development and Redevelopment

- BMP Erosion and Sediment Control Inspection Report Form
- Detention Basin Inspection Form
- List of Detention/Retention Basin Inspections

Erosion and Sediment Control Inspection Report Form		
Project Name and Location <u>PMP #3</u>		
Weather: <u>RAIN</u>		Pollution Control Measures (BMP) Checklist: <input type="checkbox"/> Inlet Barrier (i.e.: gravel bags) <input type="checkbox"/> Sediment Barriers (i.e.: ditch checks) <input type="checkbox"/> Erosion Blankets, Hydromulch / Seed, etc <input type="checkbox"/> Stabilized Construction Entrance <input type="checkbox"/> Stream Crossings <input type="checkbox"/> Seed / Sod Areas <input type="checkbox"/> Sediment Basins & Discharge Locations <input type="checkbox"/> Borrow Areas <input checked="" type="checkbox"/> General Site Condition (trash, etc)
Rain in last 24 hrs (inches): <u>.50</u>		
Owner / Permittee: <u>BAKER CONST.</u>		
A. Current Construction / Active Areas: <u>EAST SIDE CITY HALL</u> <u>PARKING</u>		
B. Problem Areas / Special Observations (*Note problem areas ONLY below*):		
BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered
C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. <u>none</u>		
D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)		

Note: Inspection comments above indicate deficiencies only. Deficiencies must be corrected within 24 hours, unless otherwise noted. All other BMP's on site are considered to be in good working condition.

9-29-23
Date of Inspection


Inspector Signature

- 6 Goals • No Sediment Leaves the Site • Lines of Defense Everywhere & Always • Cover Quickly
 • Protect the Swale, Ditch, and Channel • Keep Clean Water Clean • Inspect, Clean & Fix

Detention Basin Inspection

Basin Address and Location: _____

Owner Name and Address: _____

Inspection Date: _____

Inspected By: _____

	Y	N	N/A	Last Maintenance Date
Are inlet/outlet structures free of debris, trash, sediment, and leaves?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Repairs/Comments: _____

Is rip rap in place and free of sediment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

Are embankments and structures free of trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

Are embankments and structures damaged or eroded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

Is the facility mowed and free of trash?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
--	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is there excess sediment in the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

Is the trickle channel damaged by erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

Is the out flow of water causing damage to adjacent property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

Is there exposed soil with no vegetation growing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
---	--------------------------	--------------------------	--------------------------	-------

Repairs/Comments: _____

Is the facility draining properly according to as built plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
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Repairs/Comments: _____

City of Leavenworth			
Detention/Retention Basin 2023 Inspections			
No.	Location	Date	
1	16th Terrace	22 February	
2	226 Olive Street	*	
3	319 Olive Street	*	
4	1028 Madison Street	21 February	
5	Armed Forces Bank Pond	*	
6	Ben Day Lofts	21 February	
7	Business Tech Park	15 June	
8	Calvary Baptist Church	*	
9	Casey's	19 July	
10	Cereal Ingredients, Inc.		
11	CoreCivic Company	*	
12	Crown Estates	21 February	
13	Dillon's Supermarket	19 July	
14	Eagle Hall	21 February	
15	Hampton Inn		
16	Highland Pointe Subdivision	*	
17	Hilton Home x Suite	21 February	
18	Home Depot		
19	Leintz Funeral Home	*	
20	Pine Meadow Place	22 February	
21	Shenandoah Subdivision	11 July	
22	Southwind Subdivision	*	
23	Stove Factory Lofts	21 February	
24	Stubby Park	*	
25	The Branches Subdivision	11 July	
26	Townplace Suites	15 June	
27	University of Sain Mary	*	
28	US Army Reserve Center	21 February	
29	USD 453 Schools	Anthony Elementary	15 June
30		David Brewer Elementary	21 February
31		Henry Leavenworth Elementary	15 June
32		Lawson Elementary	22 February
33		Leavenworth High	15 June
34		Leavenworth Intermediate Center	*
35		Netti Hartnett Education Center	21 February
36		Richard Warren Middle	*
37	Walmart	19 July	
38	Westside Church	22 February	
39	Woods on Muncie Subdivision	15 June	
40	Zeck Ford	21 February	

** Inspections scheduled for 2024*

ITEM 5

Six Minimum Control Measures (Supporting Documentation)

BMP 6 - Municipal Pollution Prevention/Housekeeping

- Street Sweeping
- Salt Use

BMP 7 - N/A for City of Leavenworth

**City of Leavenworth
KDHE 2023 Annual Stormwater Report**

**Municipal Service Center
2023 Street Sweeping Data**

Street Sweeping				
Year	Vehicle No. 3332	Vehicle No. 3333	Total Hours	Total Tons
2013	555	907	1462	419
2014	522	1012	1534	338
2015	985	1043	2028	525
2016	886	896	1782	308
2017	589	972	1561	338
2018	320	311	631	334
2019	232	483	715	226
<i>Note: Starting in 2020, the City discontinued tracking hours; maintenance is tracked by mileage.</i>				

Year	3332	3333	Total Miles
2020	2,400	533	2,933
2021	1,396	*723	2,119
2022	1,593		1,593
2023	625	1,076	1,701

* Sweeper No. 3333 became inoperative in mid-June, 2021

City has a total of 343 lane miles


City of Leavenworth Municipal Service Center 2023 Salt Usage Data

Annual Salt Usage		
Year	Tons	Pounds per Lane Mile
2013	967	291
2014	520	342
2015	582	323
2016	398	356
2017	364	370
2018	675	289
2019	675	289
2020	490	419
2021	684	316
2022	721	365
2023	219	312

ITEM 6

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Permittee:  Date Signed 2-28-24
(Legally responsible person)

Name Printed: Paul Kramer Title City Manager

40 CFR 122.22 Signatories to permit applications and reports.

(a)Application. All permit applications shall be signed by either a principal executive officer or ranking elected official.

All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person.

Please note the submission requirements on page 1.

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Municipal Programs Unit

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Topeka, Kansas 66612

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