City of Leavenworth, Kansas



January 1, 2022 - December 31, 2022

Kansas Permit No: M-MO12-SN01

Federal Permit No: KSR044011

March 1, 2023



March 1, 2023

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

RE: CITY OF LEAVENWORTH KANSAS STORMWATER 2022 ANNUAL REPORT FORM FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

Please find the following submitted for compliance with 2022 Annual Report for Stormwater.

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

Sincerely,

Brian D. Faust Director of Public Works

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

ITEM 6..... Certification

RESOLUTION NO. B-2328

A RESOLUTION APPROVING THE 2022 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 14, 2023 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 2022 Annual Report for Stormwater reflects the direction, efforts and accomplishments by City of Leavenworth for calendar year 2022. 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 28th day of February 2023.

CITY OF LEAVENWORTH, KANSAS

Jermaine Wilson, Mayor

ATTEST: Sarah-Bodensteiner, CMC, City Clerk (SEAL)

KANSAS STORMWATER 2022 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

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

Reporting period covers activities from January 1, 2022 through December 31, 2022.

This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28th, 2023. The annual report is to be submitted as PDF files to KDHE preferably by email (<u>KDHE.MS4@ks.gov</u>). There is no requirement to provide hard copies of any documents.

ITEM I

Stormwater Management Program

City of Leavenworth Stormwater Management Program

Adopted by the City Commission October 27, 2020

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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.

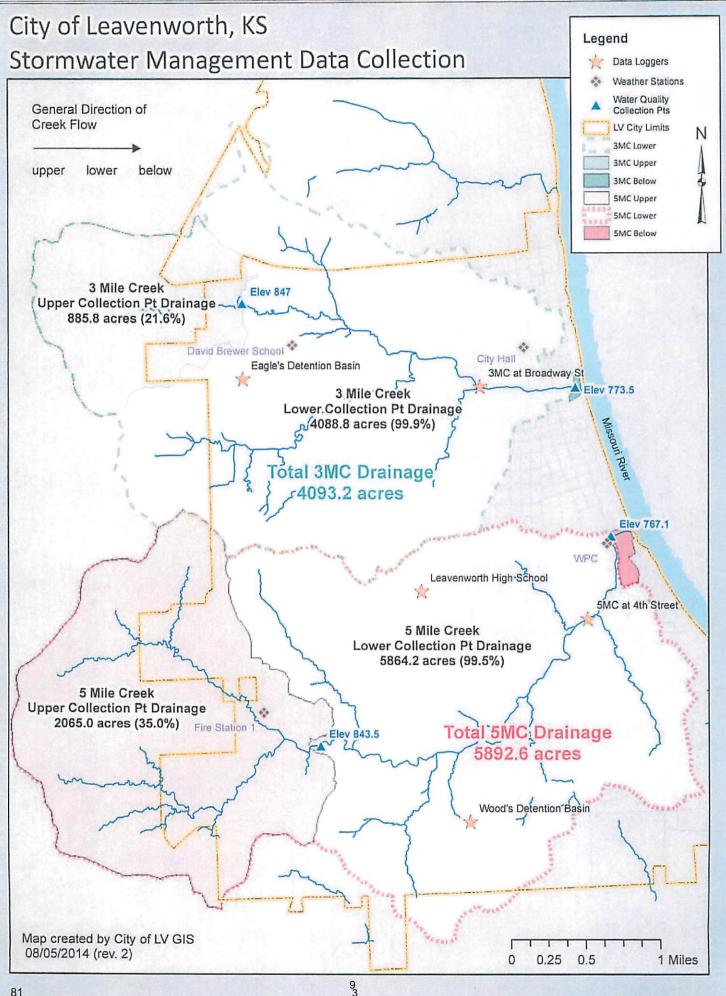
It is understandable that the City focused efforts since at least the 1980s to improve stream capacity to reduce flooding. Key improvements include:

- 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.



- 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 dat8a 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: <u>www.leavenworthks.org/publicworks</u>
- 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 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 <u>mmcdonald@firstcity.org</u> 913-684-0375

Attachments

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

1. PUBLIC EDUCATION & OUTREACH (ED & O)	2021 4 Po To	tal	7 Po To	2024 oints tal
BMP PROGRAM		PO	NTS	
ED & O - 01 - Maintain a stormwater webpage for the permittee.	3	2	2	2
ED & O - 02 - Distribute educational materials (either flyers, brochures, catalog mailings,				
handouts, or e-mails) addressing various pertinent stormwater public education	2	2	2	2
topics.				
ED & O - 03 - Provide either training or educational materials to permittee identified businesses at	2	2	2	2
high risk of contributing to stormwater pollution.	2	2	2	2
			1	
ED & O - 04 - Apply notification, placard, covers/hatches with message, or stencil, on stormwater		2		2
inlets to provide a message similar to "No Dumping – Drains to River"		2		2
		1		
ED & O - 05 - Post the municipality's MS4 permit and SMP document on either the stormwater	1	1	1	
web page or the municipal webpage.				
ED & O - 12 - Create a stormwater information brochure to provide to the public at public		in the second	1	
	1	1	1	1
meetings and/or hearings.				
ED & O - 13 - Operate an adopt-a-highway program to utilize public volunteers to clean road right-				
of-way.	1	1	1	1
or-way.	-	-		
ED & O - 15 - Hold a social media campaign addressing various pertinent stormwater public			1	
education topics.	2	2	2	2
ED & O - 17 - Operate an adopt-a-street program to utilize public volunteers to clean street right-				
of-way.	1	1	1	1
TOTAL	15		6-6-66	

	2021	2022	2023	2024
2. PUBLIC INVOLVEMENT/PARTICIPATION (P I/P)	3 Po To		6 Po To	oints otal
BMP PROGRAM		POI	NTS	
<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
		Lasta L		
<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			

	2021	2022	2023	2024
3. ILLICIT DISCHARGE DETECTION & ELIMINATION (IDD & E)		oints otal	and the second	oints Ital
BMP PROGRAM		POI	NTS	
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%		I		
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		1000	

	2021	2022	2023	2024
4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (CSSRC)	4 Po		6 Pc	
DWD DDOCDAN	То		NTS	tal
BMP PROGRAM		FUI	NIS	
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	3	2	2	2
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.				
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
	1			
CSSRC - 07 - Acquire or develop a software tracking system to track inspections and related tasks.	1	1	1	1
TOTAL	10			

5. POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT &		2022	2023	2024
REDEVELOPMENT PROJECTS (P-C SM)	5 Po To		7 Po To	
BMP PROGRAM	10		NTS	lai
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
				1
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			12.20

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING	2021	2022	2023	2024	
FOR MUNICIPAL OPERATIONS (PP/GH)	4 Po		6 Po		
BMP PROGRAM	To	POI	Total		
PP/G H - 01 - Install a screening device or method at a single municipal storm sewer outfall or on		101	NIO		
the storm sewer line immediately upstream of the outfall to reduce the discharge of	3	2	2	2	
floatables or other objects to receiving waters.		2	2	2	
PP/GH - 03 - Develop a guidance document for municipal staff or third-party contractors which apply pesticides.	2	1	1	1	
				67783	
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	
	2				
PP/GH - 07 - Implement a program to inspect stormwater inlets to identify illicit discharges and	1	1	1	1	
clean drop inlets of accumulated debris.	L '			'	
PP/GH - 08 - Develop, implement and keep updated an online storm sewer map accessible to the	r	-			
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				

Stormwater Management Program City of Leavenworth, Kansas October 27, 2020



LEAVENWORTH COUNTY, **KANSAS** AND INCORPORATED AREAS

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COMMUNITY	COMMUNITY	-	-	-	-	ابندا	in a	44	-	(and the second			-		Ľ	1
NAME	NUMBER	-	-	-	-		14	1	-	-	-	5	-	-	T	2
BASEHOR, CITY OF EASTON, CITY OF	200187 200188		T	-1		-		-	-	1144		-	2	1-4	4	F
LANSING, CITY OF	200189	-	1	-			1.5	-	1.0em	17-			1	-	-	-
LEAVENWORTH, CITY OF LEAVENWORTH COUNTY	200180 200186		6.92	-	2	-	-	-	-	hain	-	-	14		-	
UNINCORPORATED AREAS				-		-	1-	1	10	-	-	T	-	4	44	-
LINWOOD, CITY OF TONGANOXIE, CITY OF	200191 200192		-	-	-	-	-	10	1 Sale	T		-	100		-	-
TONOANOXIE, OTT OF	200132					-	-	-	1	-		-	- 14 Texase	-	-	Same
			-	1	1	-		1.000	1	1	1	1		-	-	1

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REVISED: July 16, 2015



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER

20103CV000B

Transcribed from 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 4/12 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 withinbank 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 "buyout" 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 feed 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

	the second se		the second s	and the second se									
Local Bridge No./ NBI Number	Description	Year Built	Bridge Roadway Width (Ft) ⁵	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 Haunches Slab Spans	2007	36.5	2325	45.1	97.8	No	Piling	Piling	Stone	L	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	1	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	1	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	T	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	1	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	1	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	1	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	Î	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	П	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 2022, and examining communications and publications made available to the citizens of Leavenworth.

While the impacts from the COVID-19 Pandemic were less in 2022, the City of Leavenworth continued to struggle with filling vacant positions in our Operations and Water Pollution Control Divisions. Significant increases in fuel prices combined with increased construction costs and supply chain issues also impacted our 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.

- 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.
 - o 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".

• 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.

• 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.

• What was the most challenging aspect of the program?

The most challenging was having developers install and properly maintain construction site runoff control. Development slowed in mid-to-late 2022 with the increase in interest rates so there were less homes under construction which resulted in fewer issues.

- Describe any City/County area MS4 clean ups and the participation.
 - After being unable to conduct a City-Wide Clean Up in 2020 due to COVID-19 restrictions, the City of Leavenworth was again able to sponsor a "City-Wide" clean-up day with about 35-50 groups picking up trash. This event was held on April 2, 2022.
 - 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, 2022.
 - The City has a "Three-Mile Creek" monthly clean-up program in which citizens pick up trash. In 2022, there were nine citizen groups that received a \$500 donation per group from transient guest tax dollars.

• 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 direct 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.

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

- The City coordinated a "City-Wide" clean-up day with about 35-50 groups.
- o Leavenworth County provided one HHW (Household Hazardous Waste) collection service in April 2022.
- 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 2022.

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/2022-kdhe-annual-stormwater-report-supporting-documents

- Policy Report No. 22-11 Review Draft of 2021 KDHE Annual Stormwater Report (February 8, 2022)
- Policy Report No. 22-13 *Review Final 2021 KDHE Annual Stormwater Report and Adopt Resolution No. B-2308 (February 22, 2022)*
- Resolution No. B-2308 Resolution Approving the 2021 KDHE Annual Stormwater Report (February 22, 2022)
- Policy Report No. 22-14 Consider Bids for the Cody Park Stream Improvements (February 22, 2022)
- Policy Report No. 22-18 Rejection of Bids Received for Storm Drainage Improvements at 741 Pottawatomie (March 22, 2022)
- Policy Report No. 22-20 Sanitary and Stormwater Pipe Lining Rehabilitation (April 12, 2022)
- Policy Report No. 22-24 Contract Award for Rebid of 741 Pottawatomie Drainage Project (May 10, 2022)
- Policy Report No. 22-32 Consider Approval of Low Bid for the 2nd & Chestnut Stormwater Project (July 12, 2022)
- Policy Report No. 22-38 Consider Bids for Five-Mile Creek Bank Stabilization (August 9, 2022)
- Policy Report No. 22-44 Consider Approval w/Wilson & Company for 2nd & Chestnut Stormwater Project (September 13, 2022)
- Ordinance No. 8201 Ordinance Amending Division 5, Chapter 46, Regulating and Permitting the Operation of Facilities Producing Grease-Laden Waste and Service Providers for Grease Interception Devices (December 16, 2022)

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 2022. 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 2023. City Staff and Commission will continue to evaluate the measures taken and update any associated BMPs in 2023.

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 2022.

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

There were no significant changes to the BMPs in 2022.

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

The City updated our Grease Trap/Interceptor Ordinance in 2022.

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

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	
			Has the Stormwater Management Program (SMP) been developed and implemented?
	Ø		Has the SMP been modified or updated during this reporting period?
		\boxtimes	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	
		×	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).
		X	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.

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)
	City			
	No	Pequi		
		Required	to Per	
			-200,	7

Stormwater Management Program (SMP) Requirements (Six Minimum Control Measures) (Continued)

1. Public Education and Outreach (Table) - Please fill out accordingly

List all of the public education and outreach BMPs as identified in the SMP and provide the requested information in the following table. (List presentations and media)

				<u>2021</u>		2022	
1. PUBLIC EDUCATION & OUTREACH (ED & O)			<u>4 Points Total</u>		<u>4 Points Total</u>		
BMP	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS		POINTS		
Program			Value	Actual	Value	Actual	
ED & 0 - 01	Maintain a stormwater webpage for the permittee. Stormwater webpage - <u>https://www.leavenworthks.org/citymanager/page/stormwater-projects</u>				2	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	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		2	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"	All new storm structures have the message, "Drains to Stream". City applies the message to older structures. There are a total of 224 stamps/stencils. Example can be found at: <u>https://www.leavenworthks.org/publicworks/page/2022-kdhe-annual-stormwater-report-supporting-documents</u>	2		2	2	
ED & 0 - 05	Post the municipality's MS4 permit and SMP SMP - https://www.leavenworthks.org/publicworks/page/engineering ocument on either the stormwater webpage or the municipal webpage. SMP - https://www.leavenworthks.org/publicworks/page/engineering		1	1	1	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/2022-kdhe-annual-stormwater-report-supporting-documents		1		1	1	
ED & 0 - 15	Hold a social media campaign addressing various pertinent stormwater public education topics.There were nine social media posts related to public education about improving, reducing or listing the dangers of polluting the City's stormwater system.		2		2	2	
TOTAL				4	12	12	

SMP Requirements (Six Minimum Control Measures) (Continued)

2. Public Involvement and Participation (Table) - Please fill out accordingly

List all of the public improvement and participation BMPs as identified in the SMP and provide the requested information in the following table. (List all associated and partnerships)

			2021 <u>3 Points Total</u>		2022 <u>3 Points Total</u>	
2. PUBLIC INVOLVEMENT/PARTICIPATION (P I/P)						
BMP Program	BRIEF BMP DESCRIPTION MEASURABLE GOAL(S)		POINTS		POINTS	
		Value	Actual	Value	Actual	
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.	City Commission reviewed KDHE annual stormwater report February 14, 2023. The meetings were also broadcast on the City's channel cable TV station and YouTube. City Commission reviewed stormwater projects for CIP in 2022, and approved design and construction of several projects. List and stormwater- related documents are at: https://www.leavenworthks.org/publicworks/page/2022-kdhe-annual- stormwater-report-supporting-documents	2	2	2	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 2, 2022. 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, 2022.	3	3	3	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 2022 there were nine citizen groups that participated.	3	3	3	3
TOTAL			8	8	8	8

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

a. Illicit Discharge Detection and Elimination

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

YES	NO	N/A	
X			Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?
X			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?
Ø			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? Effective date: December 16, 2022, Ordinance No. 8201
	X		Have the ordinances, resolutions, or regulations been modified? Effective date:

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

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SMP Requirements (Six Minimum Control Measures) (Continued)

3. Illicit Discharge Detection and Elimination (Table) - Please fill out accordingly

List all of the illicit discharge detection and elimination BMPs as identified in the SMP and provide the requested information in the following table.

	ILLICIT DISCHARGE DETECTION & ELIMINATION (I D D & E)			21	<u>2022</u>	
3. ILLICIT DI	SCHARGE DETECTION & ELIMINATION (IDD	<u>& E)</u>	5 Points Total		<u>5 Points Tota</u>	
BMP	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS		POINTS	
Summary	BRIEF BIMP DESCRIPTION MEASURABLE GOAL(S)		Value	Actual	Value	Actual
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 2022 to acquire the point.	1		1	
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 inspects open channels and televises pipelines, but did not meet the threshold for 2022 to acquire the points.	3		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 April, 2022.	3	3	3	3
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.	Stormwater crew inspected and/or maintained approximately 953 inlets and area drains and other stormwater facilities. Number inlets cleaned (several times during the year) - 1,472	3	3	3	3
		TOTAL	10	6	10	6

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

b. Construction Site Stormwater Runoff Control

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

YES	NO	N/A	
X			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? Effective date: 12/23/2016
X			Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
X			Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?
X			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?
×			Has a procedure been developed and implemented requiring site plan review which includes consideration of potential water quality impacts?
⊠			Has a procedure been developed for the receipt and consideration of information submitted by the public?
			Has a procedure been developed and implemented for construction site inspection and enforcement of the control measures?

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

SMP Requirements (Six Minimum Control Measures) (Continued)

4. Construction Site Stormwater Runoff Control (Table) - Please fill out accordingly

List all of the Site Stormwater Runoff Control BMPs as identifies in the SMP and provide the requested information in the following table.

			<u>20</u>	21	<u>20</u>	22	
4. <u>CONSTRUC</u>	CTION SITE STORMWATER RUNOFF CONTROL		<u>4 Points Total</u>		<u>4 Points Total</u>		
BMP Program	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POI Value	· ·····		NTS Actual	
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 project more than one acre. This includes submittal of a plan identifying all needed erosion control measures. Examples of residential and commercial LDPs can be found at: <u>https://www.leavenworthks.org/publicworks/page/2022-</u> <u>kdhe-annual-stormwater-report-supporting-documents</u>	3	3	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 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/public- education-brochures	3		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.	The City reviews every site plan for both water quantity and water quality. Building permits are not issued until water quality is addressed.	3	3	2	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	1	1	1	
		TOTAL	10	7	7	7	

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

c. 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				
Ø			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? Effective date: 12/23/2016			
			Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?			
			Has a post-construction stormwater runoff program been implemented?			
			Have post-construction sites been inspected?			
			Are BMPs specified to minimize adverse water quality impacts?			
			Have strategies been developed to include a combination of structural and/or non-structural BMP appropriate for the municipality?			
			Have measures been implemented to ensure adequate long-term operation and maintenance of structural BMPs?			

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.

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SMP Requirements (Six Minimum Control Measures) (Continued)

5. Post-Construction Site Stormwater Runoff Control (Table) - Please fill out accordingly

List all of the post-construction site stormwater runoff BMPs as identified in the SMPs and provide the requested information in the following table.

BMP Program	BRIEF BMP DESCRIPTION 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	V DEVELOPMENT & REDEVELOPMENT PROJECTS (P-C SM) MEASURABLE GOAL(S) Link to APWA/MARC manuals posted at City's website: https://www.leavenworthks.org/publicworks/page/public-education-	<u>5 Point</u> POI Value			ts Total NTS
	Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required	Link to APWA/MARC manuals posted at City's website:				
Program	Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required	Link to APWA/MARC manuals posted at City's website:	Value	Actual	Value	A
2	Post-Construction Stormwater Management which specifies various structural BMPs which are required	Link to APWA/MARC manuals posted at City's website: https://www.leavenworthks.org/publicworks/page/public-education-			value	Actual
P-C SM - 01	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.)	brochures Link to the City of Leavenworth Manual of Infrastructure Standards: https://www.leavenworthks.org/publicworks/page/designs-studies- reports	4	4	3	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.				3	
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.	Currently developing a program.	3		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.	City spent more than 30 hours conducting inspections of 34 selected sites on random, after rainfall, or with depth-recording equipment.	3	3	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.	Due to personnel changes, a Detention Public Meeting was not held.	3	3	2	7

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

d. Municipal Pollution Prevention/Housekeeping

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

Υ	ES	NO	N/A	· · · · · · · · · · · · · · · · · · ·
	Ø			The permit requires the permittee to enact a program to address pollution prevention/good housekeeping for Municipal Operations. Has such a program been enacted?

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

This section intentionally left blank

SMP Requirements (Six Minimum Control Measures) (Continued)

6. Municipal Pollution Prevention / Housekeeping (Table) - Please fill out accordingly

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

	LUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (PP/GH)		20	21	20)22
6. <u>POLLUTI</u>	ION PREVENTION/GOOD HOUSEKEEPI	NG FOR MUNICIPAL OPERATIONS (PP/GH)	<u>4 Points Total</u>		4 Points Tota	
BMP Program	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS Value Actual		POINTS Value Actual	
PP/GH - 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.	Parking lot across from City Hall screens runoff. Device was previously installed so using two points per permit.	3	2	2	2
PP/GH - 02	Implement a recycle and proper waste disposal program for municipal staff to reduce potential for litter, to recycle waste oil, batteries, glass containers, plastic containers, and paper products.	Staff is currently participating in a recycle and proper waste disposal program.	3		2	2
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.	 Street sweeping program operations continued throughout the year. <u>Sweeper No. 3332 from Jan-Dec</u>: Miles of streets swept - 1,593 	3	3	2	2
PP/GH - 07Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris.		 Stormwater crew inspected and/or maintained approximately 953 inlets and area drains, and other stormwater facilities. Number inlets cleaned - 1,472 		1	1	1
PP/GH - 08	PP/GH - 08 Develop, implement and keep updated an online storm sewer map accessible to the public. Map can be viewed at the City's GIS website: http://gis.firstcity.org/		3	2	2	2
PP/GH - 12	Install a stormwater treatment system for capture of either trash, sediment, or debris.	City installed a stormwater treatment system in inlets along Thornton Street. The system was cleaned in 2022.	3		2	2
		TOTAL	16	8	11	11

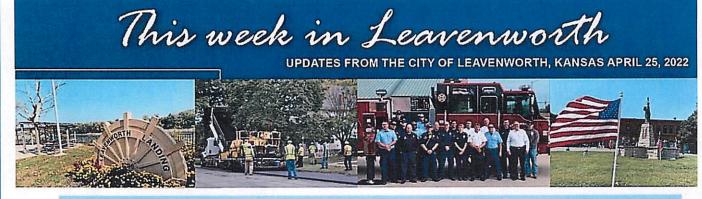
ITEM 5 Six Minimum Control Measures (Documentation)

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

- Public Information
 - o City Newsletter Stormwater-Related Articles
 - a. Arbor Day Ceremony
 - b. Legacy Tree Program
 - c. 2022 Spring Cleanup Flyer and Documents
 - Stormwater Pollution Prevention Informational Brochures which can be found at: (examples attached)

https://www.leavenworthks.org/publicworks/page/2022-kdhe-annual-stormwater-report-supporting-documents

- a. The Big 6 Stormwater Pollutants
- b. ECO-Friendly Ice Melts
- o "No Dumping, Drains to River" Stamp/Stencil
- Table of City Commission Policy Reports Related to Stormwater Management Program, KDHE Annual Stormwater Report, and City Stormwater Projects. Individual documents can also be found at the above-listed link.



Bird Scooters arrive in Leavenworth soon



A set of electric scooters for shared use are scheduled to arrive in the City of Leavenworth the week of Wednesday, April 27- Wednesday, May 4. Between 50-75 Bird scooters will be in Leavenworth. They can be used by anyone over 18 within the City of Leavenworth who possesses a valid driver's license.

The City of Leavenworth and Bird, an electric vehicle company, are teaming up to offer e-scooters to the Leavenworth community as part of a trial program. The intent of this program is to offer a transportation alternative and a fun way to travel around the Leavenworth community. Bird has entered into similar agreements for e-scooters with the cities of Kansas City, Missouri, and Overland Park, Kansas, along with more than 400 other cities globally. This ecofriendly transportation option can be activated through Bird's mobile phone application, https://

go.bird.co/. Once the application is downloaded, users can find a map of the scooter locations in Leavenworth. Bird sets pricing and fees for users. Bird offers community pricing

for low-income riders and free

rides for healthcare workers and emergency personnel who apply for a specific program in the app. State lawa prohibits electric scooter use on all highways, including Fourth Street, Spruce Street and Metropolitan Avenue.

3 ways to report an issue with an improperly parked scooter or other problem: - The Bird app will allow non-users to report problems. - Call 1-866-205-2442 - e-mail hello@bird.co.

Leavenworth hosts many Abe and Mary Todd Lincolns

Last week if you noticed several men in top hats or women in hoop skirts, it was the Lincoln Presenters Association holding their annual conference in Leavenworth. The real Abraham Lincoln visited Leavenworth once in 1859 while campaigning for President, traveling by horse and carriage. The Convention and Visitors Bureau helps to organize many conventions, group tours and small group meetings. As many events are being scheduled for the first time in 2 years, there are also many "things to do" listed on the CVB website calendar. Members of



the public can find them online at visitleavenworthks.com.

-The Leavenworth City Commission meets at 6 p.m. Tuesday April 26. Agenda items

- The Leavenworth Parks and Recreation's Arbor Day is 2 p.m. Friday April 29 at David Brewer Park. A tree-planting ceremony will honor a former Parks and Recreation Department employee.

Wednesday, May 4 at Leavenworth Landing Park. Several trucks that work in and around the Leavenworth community will be on display for children to see and touch. If your City department is interested in participating, please contact Nancy Baker, nbaker@firstcity.org.

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.

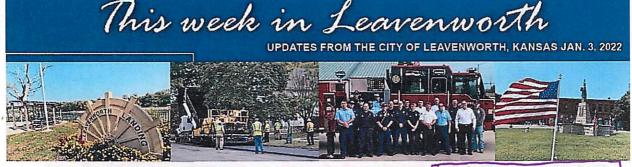
in our community? Consider adopting a Leavenworth city park or other landscaped public area. City staff will provide guidance and some materials for projects. See which parks are available and register through our website at www. leavenworthks.org/parksrec.

Rentals

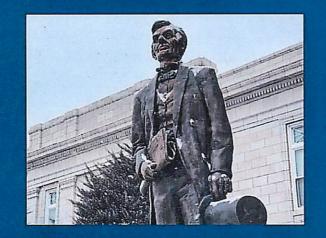
Shelters - We have 11 shelters available for rent at 7 of our parks. See our chart for parks and amenities. You can reserve and pay for these online through Eventbrite (convenience fees apply). Visit our website at www. leavenworthks.org/parksrec for details and the link to online payment.

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.



New Year, new budget



2022 begins a new budget cycle for the City of Leavenworth, which was approved by the City Commission last year. Our Finance Department has worked incredibly hard on the annual 2022 budget, and it has been submitted to receive an award from the Government Finance Officers' Association. We will find out later if we receive this award. The full budget can be read on the City's website, as "2022 Budget and Capital Improvements Program 2022-2026." The budget is an estimated document of the City's income and expenses for the year. Spring Cleanup planned for April 2

Each year the City of Leavenworth holds a Citywide Spring Cleanup event. It consists of a paper shredding event in partnership with a local bank, a Household Hazardous Waste drop-off, coincides with a "Free First Saturday" at the Brush Site and for Large Item Drop off, the Recycling Center will be open and a community-wide volunteer program to pick up trash throughout the City of Leavenworth.

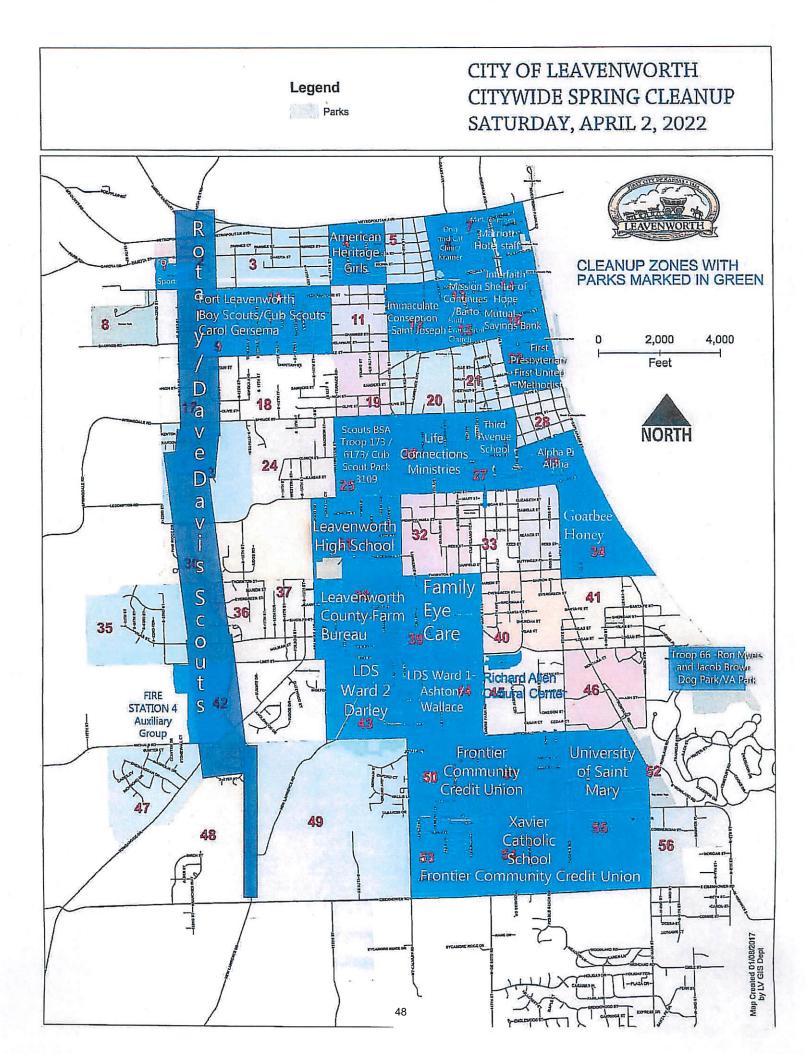
This year the event is being planned for Saturday, April 2. We will have more information on the City's website soon. For the volunteer portion of the Citywide Spring Cleanup, the city is divided into grids. Each grid is assigned to a group. Thousands of volunteers from church groups, civic clubs, scout troops, youth groups, small businesses and even local politicians all enjoy helping to pick up trash. Following the trash pickup, our Solid Waste Team sends a crew to pick up the filled trash bags.

We will not be accepting sign-ups for volunteer grid sign-ups until February. Prior to this event, we can always use help finding "hot spots" in the City of Leavenworth that need some special attention for trash pickup. If you see any, contact Melissa Bower at melissab@ firstcity.org.

- The Leavenworth City Commission meets January 4. Agenda items include a discussion of Camp Leavenworth and an economic development project at 600 Cherokee Street. It should be noted that the meetings in 2022 have moved to 6 p.m., one hour earlier than previously. Agendas are on the City website each Friday before the meeting.

- The Leavenworth County Health Department is continuing its COVID-19 vaccination clinics for those who wish to be vaccinated. Like areas around us, infection rates have increased. Updates can be found on the Leavenworth County Health Department's COVID web page on the County government website. There is one vaccine clinic for Thursday, Jan. 6 from 9 a.m. to 4 p.m. at the health department offices, 500 Eisenhower Road, for adults and children ages 5 and up. Vaccines are free.

- The City's Snow and Ice Policy Manual is on the City's website if community members have questions. It is under the Public Works section. There is also a link on the City's home page under "City prepares for snow and ice season 2021-2022" that also lists our emergency snow routes.





WHAT CAN BE USED INSTEAD OF SALT?

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.

City of Leavenworth, Kansas

"NO DUMPING, DRAINS TO RIVER" Stamp/Stencil



City of Leavenworth, Kansas

	City of Leavenworth, Kansas							
	2022 Stormwater-Related Policy Reports & City Commission Minutes							
	(which can be found at this link: www.leavenworthks.org/publicworks/page/engineering)							
No. Date Type Subject								
1	2/8/2022		Review Draft of Annual KDHE 2021 Stormwater Report					
2	2/22/2022		Review Final of Annual KDHE 2021 Stormwater Report and Adopt Resolution B-2308					
3	212212022		Cody Park Stream Improvements					
4	3/22/2022	Delieu	Reject Bids for 741 Pottawatomie					
5	4/12/2022	Policy Report	Sanitary and Stormwater Pipe Lining					
6	5/10/2022	report	Contract Award for Rebid of 741 Pottawatomie Drainage Project					
7	7/12/2022		Award of the 2nd and Chestnut Stormwater Project					
8	8/9/2022		Five-Mile Creek Bank Stabilization at Warren Middle School					
9	9/13/2022		Consider Approval w/Wilson & Company for 2nd & Chestnut Stone Arch Replacement					

ITEM 5 Six Minimum Control Measures (Documentation Continued)

BMP 3 - Illicit Discharge Detection and Elimination

• Employee Training - link is:

https://www.leavenworthks.org/publicworks/page/2022-kdhe-annual-stormwater-report-supporting-documents

- Grease Prevention Program Summary
- Ordinance No. 8201 Ordinance Amending Division 5, Chapter 46, Regulating and Permitting the Operation of Facilities Producing Grease-Laden Waste and Service Providers for Grease Interception Devices (December 16, 2022)
- Municipal Service Center Household Hazardous Waste Cleanup Data
- Maps Showing Stormwater System and Outfalls

2022 City of Leavenworth Employee Stormwater Training & Meetings							
No.	Training	Employee Name(s)	Date Completed				
	City Ha						
1	Permanent Stabilization for Roads, Highways & Bridges		January				
2	Improve Energy Infrastructure Resilience						
3	Using Technology and Data to Manage Storm Events	Justin Stewart	February				
4	Pipe School - Building Sustainable Resilience	_	March				
5	ACPA Training: Proper Pipe Installation		April				
6	Duke's Root Control Sanitary I&I	Earl Wilkinson, Michael Stephan, Justin Stewart, Tim Guardado, Jon Lemke	July				
7	Trenchless Rehabilitation Solutions	Earl Wilkinson, Michael Stephan, Terry Smith, Becky Beaver, Derek Burleson	August				
8	TCPA Solutions for Failing Culverts Webinar		November				

City of Leavenworth Grease Prevention Program 2022 Summary

February 7, 2023

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 ongoing efforts include the following general activity:

- 1. Contact property owners and 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. Perform annual inspections of the grease traps/interceptors to ensure they are installed and maintained correctly.
- 3. Communicate the need for routine maintenance by sending letters and requesting copies of maintenance records.

Utilizing records from 2021, there were 86 businesses identified in 2022 that staff believed may require a grease trap/interceptor. Letters were sent at the end of the year requesting that the establishment contact the Building Inspection Office and schedule an inspection of the grease trap/interceptor.

Staff performed 36 documented inspections on grease traps in 2022.

There were 0 new grease traps/interceptors that were installed in 2022.

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.

There will be changes made to the program in 2023. The City Commission has approved a plan that will include an annual grease trap/interceptor license that will be issued to each establishment. An annual inspection and copies of maintenance records for the previous year will be required before the license can be issued or renewed. There will also be fines for operating the devices without a license and not maintaining the devices in proper working conditions. Establishments will be sent notification of the new policies and given adequate time to adhere to them once all of the details have been worked out at the staff level.

ORDINANCE NO. 8201

AN ORDINANCE AMENDING CHAPTER 46 (UTILITIES), ARTICLE III (SEWERS), DIVISION 2 (CONNECTIONS) AND DIVISION 4 (INDUSTRIAL WASTES), AND CERTAIN SECTIONS THEREIN, AND ADDING NEW AND SUBSTITUTE PROVISIONS, AND REPEALING THE PREVIOUS SECTIONS SO AMENDED.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LEAVENWORTH, KANSAS:

<u>Section 1</u>. Section 46-92 of the Leavenworth Code of Ordinances is hereby deleted in its entirety and amended to read as follows:

Sec. 46-92. - Unlawful connections.

It is and shall be unlawful to connect an open gutter, cesspool, privy vault or any drain of any kind whatsoever of the surface water from the roof or yard to a sanitary sewer, or to connect any sanitary sewer or sanitary sewage to any drainage or stormwater sewer. In addition, it is and shall be unlawful for any property owner to maintain any sewer service line from the structure to the main, to include the connection at the main, that allows the flow of sewage or other waste into the soil around the service line and/or connection or that allows ground water (inflow and infiltration) into the service line, connection, or main.

Section 2. A new Section 46-93 is hereby added to the Leavenworth Code of Ordinances, to read as follows:

Sec. 46-93. - Failure repair; fees.

Upon notification by the city of any unlawful service line or connection, the property owner shall have thirty (30) days from the date of notice to repair the service line or connection. Failure on the part of the property to make the necessary repairs will result in the City initiating the repairs and assessing the property owner for all costs of the repairs and the appropriate administrative fee as prescribed in the city fee schedule, as amended. All fees not paid within thirty (30) days after completion of the repairs by the city, shall result in the costs being assessed to the property in accordance with the standard practices for the assessment of other fees.

<u>Section 3.</u> Chapter 46, Article III, Division 2 of the Leavenworth Code of Ordinances, is hereby amended to provide that Secs. 46-94 through 46-112 are reserved, as follows:

Secs. 46-94-46-112. Reserved.

<u>Section 4</u>. Section 46-150 of the Leavenworth Code of Ordinances is hereby deleted in its entirety and amended to read as follows:

Sec. 46-150. - Prohibited wastes.

The following wastes shall not be discharged into the city sewers:

- (1) Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit, except where the volume of discharge represents a significant portion of the flow through a particular sewer, a lower limit may be prescribed to prevent odor nuisance.
- (2) Stormwater and surface drain water.
- (3) Wastes having a pH less than 5.5 or more than 10.0 or otherwise having chemical properties which are hazardous or are capable of causing damage to the sewage works or personnel.
- (4) Garbage or waste that has not been properly shredded.
- (5) Insoluble oils, fats and greases. So-called soluble oils may be permitted to the extent of 100 mg/L; provided, that subsequent dilution in the sewers or treatment plant does not result in separation.
- (6) Gasoline, naphtha, benzene, oil and other flammable or explosive liquids, solids or gases.
- (7) Any waste which contains more than 100 mg/L of fat, oil and grease (exclusive of soap).
- (8) Any corrosive, noxious or malodorous material or substance which either singly or by reaction with other wastes is capable of causing damage to the sewage works or creating a public nuisance or hazard or preventing entry into the sewers for maintenance and repair.
- (9) Any material or substance not specifically mentioned in this section which is in itself corrosive, irritating to human beings and animals, toxic or noxious or which by interaction with other wastes could produce undesirable effects including deleterious action on the sewage works, adversely affect any treatment process, constitute a hazard to human beings or animals or have an adverse effect upon the receiving stream.
- (10) Grease-laden Waste effluent discharge that is produced from food processing, food preparation, or other sources where grease, fats, and oils enter automatic dishwasher pre-rinse stations, sinks, or other appurtenances.

<u>Section 5</u>. Chapter 46, Article III, Division 4 of the Leavenworth Code of Ordinances, is hereby amended to provide that Secs. 46-155 through 46-199 are reserved, as follows:

Secs. 46-155-46-199. Reserved.

<u>Section 6</u>. A new Division 5 is hereby added to Chapter 46, Article III the Leavenworth Code of Ordinances, to read as follows:

DIVISION 5.—REGULATING AND PERMITTING THE OPERATION OF FACILITIES PRODUCING GREASE-LADEN WASTE AND SERVICE PROVIDERS FOR GREASE INTERCEPTION DEVICES

Sec. 46-200. – Definitions.

The following words and terms, as used in this division, shall be deemed to mean and be construed as follows:

Automatic Grease Removal Device – a plumbing appurtenance installed in a sanitary drainage system to intercept free-flowing fats, oils, and grease from wastewater discharge. Such a device operates on a time or event-controlled basis and has the ability to remove free-floating fats, oils, and grease automatically without the intervention from the user, except for maintenance.

Grease Interceptor – a plumbing appurtenance installed in a sanitary drainage system to intercept oily and greasy wastes from a wastewater discharge. Such device has the ability to intercept free-flowing fats and oils with a flow rate greater than 50 gallon per minute.

Grease Trap - (also known as grease interceptor, grease recovery device and grease converter) is a plumbing device designed to intercept most greases and solids before they enter a wastewater disposal system. They are used to reduce the amount of fats, oils and greases (FOGs) that enter the main sewers with a flow rate less than 50 gallon per minute.

Food Service Establishment – any facility that prepares and/or packages food for sale or consumption, on or off site, with the exception of private residences. The term "food service establishment" includes, but is not limited to food courts, food manufacturers, food processors, food packagers, restaurants, grocery stores, delicatessens, bakeries, lounges, hospitals, hotels, nursing homes, churches, college dining halls, Greek housing (sororities and fraternities), prisons, and cafeterias in schools.

Grease-Laden Waste – Effluent discharge that is produced from food processing, food preparation, or other sources where grease, fats, oils, and grease enter automatic dishwasher pre-rinse stations, sinks, or other appurtenances.

Sec.46-201. - Grease Discharge Permit Required; Application, Term, and Fee.

- (a) It shall be unlawful for any person, firm, or corporation to operate a facility in which grease-laden waste is produced without obtaining a grease discharge permit for each grease removal device located at the facility. Provided that, "facility" shall not include any individual dwelling unit as such term is defined by the latest adopted building codes of the city. All food service establishments shall be presumed to be facilities in which grease-laden waste is produced.
- (b) The owner, manager, or agent of a facility shall make written application to the Director of Public Works, or a designee, on a form furnished by the city. The application shall be accompanied by the appropriate fee per the city fee schedule, as amended, and for renewals, shall include a copy of the maintenance log per Section 46-203(g) below. Facilities have until the last working day of the month in which their permit expires, per paragraph (c) of this section, to complete the requirements to renew their permit. Permits

issued pursuant to this division are nontransferable. A new permit application and fee shall be required for each change of ownership of a licensed facility.

- (c) Permits shall be renewed annually by May 1.
- (d) The Director of Public Works, or a designee, shall issue or renew a permit for a facility that complies with the terms of this division. The Director of Public Works may modify the terms and conditions of any permit, in order to protect the sanitary sewer system. The permit holder shall receive at least thirty (30) day notice of such modification, except in the event of an emergency as described in Section 46-204(e) below.
- (e) The permit fee shall be as stated in the city fee schedule, as amended, for a grease removal device and only one fee per facility. Permit fees shall not be prorated for permits in effect for less than the full calendar year. If a facility fails to submit all needed documents to renew its permit(s) prior to expiration, an additional late fee, as stated in the city fee schedule, will be assessed for each month until the documents are received. A facility that is late in renewing its permit shall be in violation of this ordinance and any assessed late fees shall be in addition to the penalties provided for in Section 46-206(c) and (d) below.

Sec. 46-202. - Conditions of the Grease Discharge Permit; Variances

Each facility with a grease discharge permit is subject to the requirements of this section. Failure to abide by these requirements shall be unlawful. The requirements are as follows:

- (a) Each facility shall install and maintain grease removal devices as required by the latest adopted Plumbing Code of the city. If the facility's existing grease removal devices are not adequately sized for the facility's activities, the facility shall replace the devices to meet the requirements of the latest adopted Plumbing Code of the city. Installations in existence prior to the adoption of this section shall not be required to replace the existing grease removal device provided a maintenance plan is submitted and approved by the Director of Public Works, or designee, that ensures grease-laden wastes will not enter the city's wastewater system.
- (b) The permit holder shall ensure the inspection of, and shall maintain, and require all employees, agents, and other representatives to maintain the grease removal devices in accordance with the requirements of Section 46-203 below and the best management practices approved by the Director of Public Works and in accordance with the manufacturer's installation and maintenance instructions.
- (c) The permit holder shall allow the facility to be inspected by the city, and the permit holder shall make grease removal devices accessible and exposed for inspection purposes, in connection with the issuance or renewal of a grease discharge permit, or at any reasonable time, without prior notice, to confirm the permit holder's compliance with this division. Such inspections may include measuring, testing, or sampling.

(d) A permit holder may make written request to the Director of Public Works for a variance from any of the requirements of this division. Such written request must be made on a form provided by the city. The Director of Public Works, or a designee, will issue a written response to the variance request within thirty (30) days. Denials may be appealed to the City Manager through the process described in Section 46-204(f) below.

Sec. 46-203. – Maintenance of Grease Interceptors and Devices; Best Management Practices; Pumping and Minimum Pumping Frequency; Inspection; Maintenance Log.

- (a) <u>Illegal Discharge</u> It is and shall be unlawful for the permit holder to discharge grease-laden waste into the sanitary sewer collection system without using a functional grease removal device. It is and shall be unlawful for the permit holder to direct or allow any person to discharge grease-laden waste into the sanitary sewer collection system without using a functional grease removing device.
- (b) <u>Pumping</u> All grease removal devices shall be maintained by the user at the user's expense. Maintenance shall include the complete removal of all contents, including floating materials, wastewater, and bottom sludge and solids by a registered service provider pursuant to Section 46-205 below. Decanting or discharging of removed waste back into the grease removal device from which the waste was removed or any other grease removal device, for the purpose of reducing the volume to be disposed, is prohibited.
- (c) <u>Minimum Pumping Frequency</u> Grease removal devices must be pumped out completely a minimum of once every 180 days, or more frequently as needed, to prevent carryover of grease into the sanitary sewer collection system.
- (d) <u>Best Management Practices</u> The Director of Public Works shall adopt best management practices to ensure continual and effective operation of grease removal devices, and the Director may update or modify the best management practices to meet or exceed industry standards. The permit holder shall comply with, and cause the permit holder's employees, agents, and other representatives to comply with, the best management practices adopted by the Director of Public Works.
- (e) Spills If grease-laden waste spills onto the public right-of-way, parking area, driveway, or other location that may cause run-off into the stormwater management system, the spill shall be immediately cleaned up in a manner that complies with the best management practices approved by the Director of Public Works. The permit holder shall notify the Director of Public Works, or a designee, that such spill occurred by as soon as possible. If the permit holder fails to clean the spill to the City's satisfaction, then the spill constitutes, and shall be treated as a nuisance pursuant to Chapter 28 of the City Code of Ordinances, and a violation of Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), of which prohibits the unauthorized discharge of pollutants from a point source into any waters or tributary of navigable waters of the United States and thereby creates a nuisance and hazard to the community as

defined by the Environmental Protection Agency and shall be subject to additional enforcement in accordance with those provisions.

(f) <u>Inspection</u> – The permit holder shall have all Automatic Grease Removal Devices, Grease Traps and Grease Interceptors inspected by a registered service provider pursuant to Section 46-205 on an annual basis. Such registered service provider may not be the permit holder or an employee of the permit holder. Grease removal devices must be emptied by the service provider at the time of service or cleaning. The results of the inspection shall be recorded on the maintenance log described in paragraph (g) below or the service manifest from the disposal/service provider and shall be reported on a separate inspection form produced by the city and submitted to the city within fifteen (15) days of the inspection date. An inspection report will only be considered valid for permit renewal if it has been completed within sixty (60) days prior to the permit expiration date per Section 46-201(c).

If the inspector notes deficiencies in a grease removal device, the permit holder shall ensure that a city licensed plumbing contractor obtain a plumbing permit from the Leavenworth Building Inspection Division, if required, and make necessary repairs to ensure compliance within sixty (60) days of the date of the inspection, unless an extension is approved by the Director of Public Works. The permit holder shall provide documentation of such repairs to the Director of Public Works, and allow inspection thereof, within fifteen (15) days of the completion of the repairs.

- (g) <u>Maintenance Log</u> On a form furnished by the city, each permit holder shall maintain a true and accurate log for each of the grease removal devices which provides for entry of the following information:
 - (1) The date of each pumping service; the name of the person performing the service and the name of the company with which the service provider is affiliated; the amount removed; the condition of the device; and the signature of the manager or authorized representative of the facility in which the grease removal device is located; and
 - (2) All of the information regarding the annual inspection required by paragraph (f); the name of the person performing the inspection; and the name of the company with which the inspector is affiliated.
 - (3) The manifest with all the required information from the pumping service in Section 46-203(g)(1) above may be attached to the maintenance log in lieu of written entry of the information.

The maintenance log shall be kept in a readily accessible location and made immediately available upon request of a city representative. Each permit holder shall submit a copy of the previous year's maintenance log when renewing their annual permit and shall maintain copies of the log for three (3) years. If a maintenance log is lost and cannot be submitted, the permit holder shall have an opportunity to verify all of the information required by the maintenance log in a manner acceptable to the city, any failure to do so within ten (10) days following the city's request shall be unlawful and a violation of this division.

Sec. 46-204 - Denial, Suspension, Revocation of Permit, or Water Service Disconnect.

- (a) The Director of Public Works may deny, revoke, or suspend a permit, and/ or request disconnection of the water service for any of the following reasons:
 - (1) Failure to submit a complete application or pay any fees;
 - (2) Fraud, misrepresentation, or false statement in the permit application or inspection and repair records; or
 - (3) Failure to comply with any of the provisions of this or any other city ordinance or other law.
- (b) Such denial, revocation, suspension, or discontinuance shall not become effective until the applicant/permit holder has been served a notice. The notice shall state the reason for noncompliance and include a time period for the applicant/permit holder to comply. Service (serving of notice) may be accomplished by personal service, or regular mail. Service by regular mail shall be deemed complete three (3) days after the city has placed the notice in the US mail. Such notice shall inform the applicant/permit holder of the action taken and shall notify the person of the right to appeal, pursuant to Section 46-204(f). Such action shall be effective upon the seventh day following service upon the applicant/permit holder, unless an appeal is filed. If an appeal is filed, such action shall be stayed until the final written decision on the appeal is rendered.
- (c) In any suspension of the license, the Director of Public Works may place such conditions upon the suspension as deemed advisable. Any conditions of the suspension shall be set forth in the notice.
- (d) Operating a facility after the effective date of a permit's denial, revocation, or suspension is and shall be unlawful.
- (e) Emergency Suspension The Director of Public Works may pursue immediate suspension of the water service when, in the opinion of the Director of Public Works, such suspension is necessary to stop an actual or threatened discharge which presents or may present an imminent or substantial danger to the public health, safety, or welfare, or to prevent interference with, or a threat to, the sanitary sewer collection system. If the person notified of such suspension fails to comply with the order, the director shall take steps necessary to discontinue water service. The person may file a written appeal to such order with the City Manager, within two (2) business days of the order being made, and the appeal shall be heard within two (2) business days of the filing. Service shall remain suspended during the appeal period. Service shall be reinstated when the condition causing the threat is corrected, or if the person successfully appeals the director's order.

(f) <u>Appeal and Hearing</u> - A person receiving any notice or order may appeal the requirements contained therein pursuant to this subsection, except in the case of an emergency order, which shall comply with the process set forth in Section 46-204(e). The person must file a written appeal with the City Manager within seven (7) days of receiving service, and the appeal must state why the requirements should be modified or should not apply to the recipient. The City Manager will hold a hearing, at which the person must be heard, within seven (7) days of receiving the appeal.

Sec. 46-205. - Registration and Inspection.

- (a) The city will establish and manage registration for all persons, firms, or businesses that desire to be authorized to pump, clean, and/or inspect grease removal devices within the sanitary sewer service area. The registration shall be for a period of three (3) years at which time the person, firm, or business must re-register. The registration required by the city shall be in addition to any other permits, registrations, or occupational licenses required by federal, state, and local agencies having lawful jurisdiction. The registration is not transferable. There are no fees required to be registered.
- (b) <u>Pumping and Cleaning</u> Any person, firm, or business desirous of collecting, pumping, or hauling wastes from, or cleaning Automatic Grease Removal Devices, Grease Traps and Grease Interceptors from businesses located within the sanitary sewer service area shall be required to register with the city. It is and shall be unlawful for any person, firm, or business to pump out or clean grease removal devices within the sanitary sewer service area without being registered.
- (c) <u>Inspection</u> A registered service provider person, firm, or business may also perform inspections of grease removal devices per Section 46-203(f). Food service establishment owners, or employees thereof, may complete the inspection in an un-official capacity, but they will not be qualified to perform the official inspections required by the ordinance. It is and shall be unlawful for any person or employee of a firm or business to perform inspections of a grease removal device within the sanitary sewer service area that is not registered.
- (d) <u>Plumbers</u> Any plumber desirous of installing, repairing, and/or inspecting automatic grease removal devices or grease interceptors within the sanitary sewer service area per Section 46-205 shall be licensed through the Building Inspection Division of the City of Leavenworth. Plumbers shall also be required to be a registered service provider through the city for the purpose of performing inspections. It is and shall be unlawful for any plumber to perform inspections or repairs of grease removal devices within the sanitary sewer service area without being licensed, registered, and certified.

Sec. 46-206 - Enforcement.

(a) Before additional action is taken to enforce the provisions of this division, a person or entity found to be in violation shall first be served with a notice of violation. Notice will be deemed sufficient if it is delivered by personal service

or regular mail and adequately describes the nature of the violation and outlines a reasonable timeline for the alleged violator to come into compliance of at least ten (10) days following the date of notice. Notice shall be deemed given immediately in the case of personal service and in the case of service by regular mail, three (3) days after the date of mailing.

- (1) Upon the finding of a suspected violation or illicit discharge into the sanitary sewer collection system, the City Inspector shall be notified to do an immediate and unannounced inspection of the grease removal devices in the suspect facility.
- (2) If a violation of the maintenance requirements for the grease removal device has been identified, the facility shall be responsible for all costs associated with the cleaning and removal of the violation in the sanitary sewer collection system. All cleaning and removal costs will be in accordance with the city fee schedule, as amended. Any fee imposed for cleaning of the sanitary sewer collection system and/or removal of grease from the sanitary sewer collection system that has not been paid within thirty (30) days of receipt of the billing, shall be deemed a violation of this ordinance. Service shall be in accordance with Section 46-206(a).
- (b) Following the expiration of the time period granted in paragraph (a), a person or entity found to be in violation of this division shall be guilty of a misdemeanor.
- (c) A fine not to exceed \$500.00 shall be levied upon a first conviction. Each day of violation shall constitute a separate offense.
- (d) A fine not less than \$500.00 and not to exceed \$1,000.00 shall be levied upon a second and subsequent conviction. Each day shall constitute a separate offense.

Section 7. Sections 46-92, 46-93, and 46-150 of the Leavenworth Code of Ordinances, in existence as of and prior to the adoption of this ordinance, and all other sections in conflict with the terms of this ordinance, are hereby repealed.

Section 8. This ordinance shall take effect and be in force from and after its publication in the official city newspaper as provided by law.

PASSED and APPROVED by the Governing Body on the 13th day of December 2022.

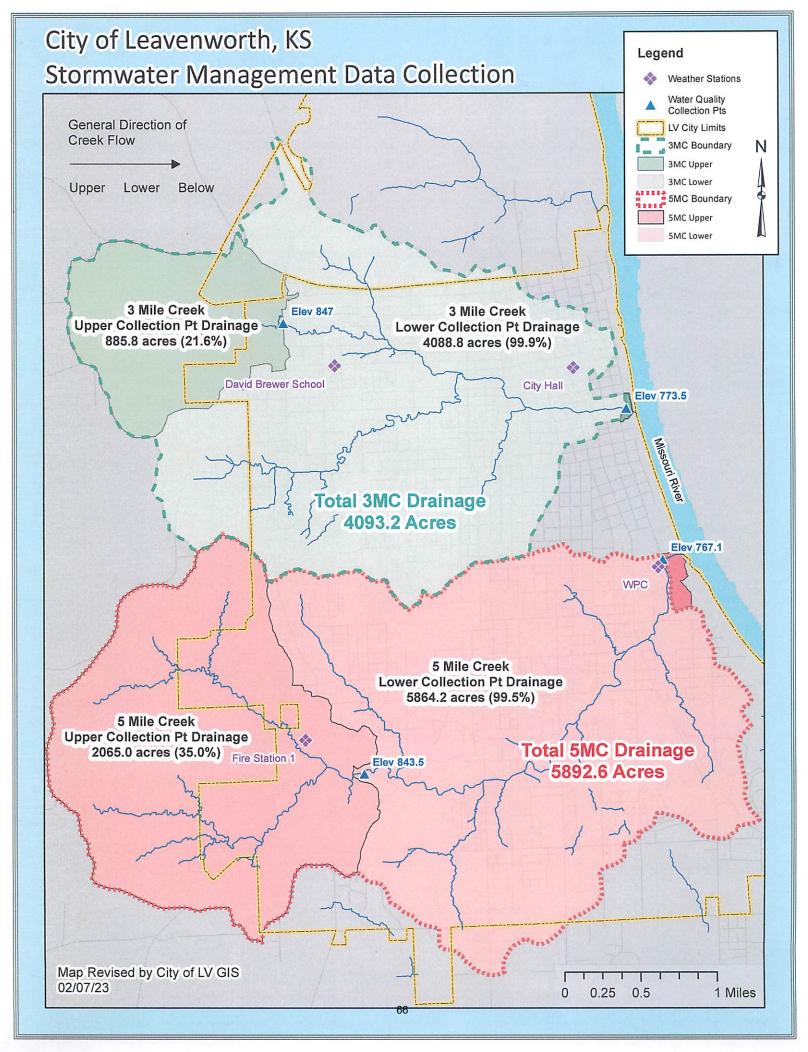
Camalla M. Leonhard, Mayor unin, unit {SEAL} ATTEST: 10 Minuter Sarah Bodensteiner. City Clerk 1116411111

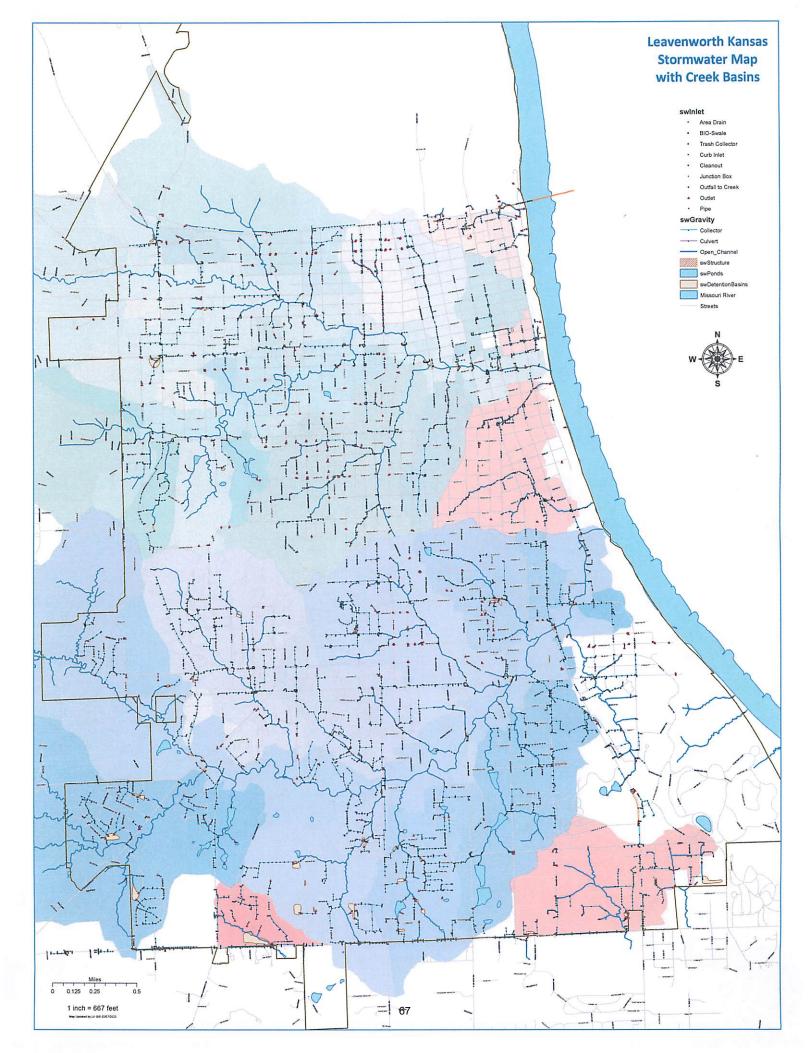
OP 3364176.2

City of Leavenworth Household Hazardous Waste Clean Up

Household Hazardous Waste				
Participation by	Materials			
Item	Weight (Pounds)			
Latex Paint	2,640			
Oil Base Paint	32			
Flammable Liquids	400			
Poisons	160			
Corrosives	80			
Aerosols	44			
Antifreeze	64			
Car Battery	0			
Total	3,420			

Customers Serviced - 56





ITEM 5 Six Minimum Control Measures (Documentation Continued)

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/2022-kdhe-annual-stormwater-report-supporting-documents

Project Name	rosion and Sedin and Location 1320	3Anut	APP 276
Weather:	A	109	Pollution Control Measures (BMP) Check
Rain in last 24	nrs (inches):	,H	A Inlet Barrier (i.e.: gravel bags)
Owner / Permittee: <u>A. Current Construction / Active Areas:</u>			Sediment Barriers (i.e.: ditch checks) Erosion Blankets, Hydromulch / Seed, e
			Stabilized Construction Entrance
	Appi	1.	Seed / Sod Areas
			Sediment Basins & Discharge Locations
			Borrow Areas
			General Site Condition (trash, etc)
B. Problem Are	as / Special Observation	s(*Note proble	m areas ONLY below*):
BMP			
DIVIF	Location	Obser	vations, Effectiveness, & Corrective Actions Ord
. Listing of Are	as where construction of	Derations have	permanently or temporarily stopped; stabilization
easures initiate	<u>d.</u>	perations have	permanently or temporarity stopped; stabilization
	·		
. Have items not	ted on last inspection be	en corrected?	Yes No (if No, Explain;)
			y. Deficiencies must be corrected within 24 hour

<u>1/3/72</u> Date of Inspection Mullen

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 (Documentation Continued)

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 BRANCHES TIL ZOLI - 956							
Weather:	P: (prid)	Pollution Control Measures (BMP) Checklist:					
Rain in last 24 hrs Owner / Permittee <u>A. Current Constr</u> ENTINE 54	REILLEY Hem uction / Active Areas:	Inlet Barrier (i.e.: gravel bags) Sediment Barriers (i.e.: ditch checks) Erosion Blankets, Hydromulch / Seed, etc Stabilized Construction Entrance Stream Crossings Seed / Sod Areas Sediment Basins & Discharge Locations Borrow Areas General Site Condition (trash, etc)					
B. Problem Areas	S / Special Observations(*Note problen	areas ONLY below*):				
BMP	Location	Observ	vations, Effectiveness, & Corrective Actions Ordered				
silt Ferce	Multiple		L + Repairs silt FENCE				
Butter gunds	Multiple	Clear	* Replace Gurten guards				
<u>C. Listing of Area</u> measures initiated	C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated. EATIZE Sub 2; VISION						
D. Have items noted on last inspection been corrected? Les (No) (if No, Explain:) NO ITEMS Have Been Repaired OR CLARED Silt FENCE NOTED ON MARCH 30, 2022							
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.							

ADRIL 4, 2022 Date of

IT.

Inspection

Unspector 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

Ero	sion and Sediment	t Control Inspection Report Form
Project Name and	Location Croy PAR	K 2021-972
Weather: Rain in last 24 hrs (inches): 50 Owner / Permittee: <u>LinaWEAVER</u> <u>A. Current Construction / Active Areas:</u> HUNE		Pollution Control Measures (BMP) Checklist: Inlet Barrier (i.e.: gravel bags)
		 Sediment Barriers (i.e.: ditch checks) Erosion Blankets, Hydromulch / Seed, etc Stabilized Construction Entrance Stream Crossings Seed / Sod Areas Sediment Basins & Discharge Locations Borrow Areas General Site Condition (trash, etc)
B. Problem Areas	/Special Observations(*No	ote problem areas ONLY below*):
BMP	Location .	Observations, Effectiveness, & Corrective Actions Ordered
intern es minitet.	rojeer com	
	d on last inspection been co	
Vote: Inspection con Inless otherwise not	nments above indicate defic ed. All other BMP 's on site	ciencies only. Deficiencies must be corrected within 24 hours, are considered to be in good working condition.

5.5-ZZ

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

Rain Inspection Form				
Project Application # 2021-963 Job Location Geiger Parking Let Emproyement				
Weather: <u>Light Rain, Cloudy</u> Rain in last 24 hrs (inches): <u>O. 67</u> Owner / Permittee: <u>Geiger / Lexeco</u> <u>A. Current Construction / Active Areas:</u> <u>Geiger Parking Lot Improvement currently</u> Inactive		Pollution Control Measures (BMP) Checklist: Inlet Barrier (i.e.: gravel bags)		
		 Sediment Barriers (i.e.: ditch checks) Erosion Blankets, Hydromulch / Seed, etc Stabilized Construction Entrance Stream Crossings Seed / Sod Areas Sediment Basins & Discharge Locations Borrow Areas General Site Condition (trash, etc) 		
B. Problem Areas / Special Observations(*Note	e problem	areas ONLY below*):		
BMP (erosion control) Location	Observ	vations, Effectiveness, & Corrective Actions Ordered		
C. Listing of Areas where construction operation	ons have	permanently or temporarily stopped; stabilization		
measures initiated. No stabilization needed at this time				
<u>D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)</u>				

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.

<u>1/25/22</u>

Date of Inspection

11

Permit holder 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

Er	osion and Sediment	Contro	ol Inspection Report Form
Project Name a	nd Location 741-76	TTAWATO	MIE - 2021-951
Weather: Rain in last 24 h	dear_		Pollution Control Measures (BMP) Checklist:
Owner / Permitte <u>A. Current Cons</u> (S&A & E CTCC SS	.50 9- 3e. <u>KISSICK</u> <u>truction / Active Areas:</u> TDEET HHY	10-22	 Sediment Barriers (i.e.: ditch checks) Erosion Blankets, Hydromulch / Seed, etc Stabilized Construction Entrance Stream Crossings Seed / Sod Areas Sediment Basins & Discharge Locations Borrow Areas General Site Condition (trash, etc)
<u>Problem Area</u>	s/Special Observations(*No	<u>te problem</u> 1	areas ONLY below*):
BMP Location			ations, Effectiveness, & Corrective Actions Ordered
	· .		
Listing of Area easures initiated	Les where construction operation NOW TE	ons have p	ermanently or temporarily stopped; stabilization
Have items note	ed on last inspection been cor	rected?	Yes No (if No, Explain:)
14			
10. Junmantin			
ess otherwise no	mments above indicate deficie ted. All other BMP's on site a	ncies only. re consider	Deficiencies must be corrected within 24 hours, ed to be in good working gondition.
-12-22	•		(to far II)

Date of Inspection

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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

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Eros	ion and Sedjment C	Contro	l In	spection Report Form
Project Name and	144 All-			
Weather: Cloud 4			Pol	ution Control Measures (BMP) Checklist:
Rain in last 24 hrs (X	Inlet Barrier (i.e.: gravel bags)
Owner / Permittee <u>LEXECU</u> <u>A. Current Construction / Active Areas:</u> STORM SEWER BAI CHESTNUT		7		Sediment Barriers (i.e.: ditch checks) Erosion Blankets, Hydromulch / Seed, etc Stabilized Construction Entrance Stream Crossings Seed / Sod Areas Sediment Basins & Discharge Locations Borrow Areas General Site Condition (trash, etc)
B. Problem Areas	/Special Observations(*Note	e problem	arel	rs ONLY below*):
BMP	Location	Observ	ation	ns, Effectiveness, & Corrective Actions Ordered
	·			. ·
				nanently or temporarily stopped; stabilization
<u>measures initiatea</u>	OUTFLOW OF HEL	N 845	STE	m
D. Have items not	ed on last inspection been co	rrected?	Ye	s No (if No, Explain:)
				Deficiencies must be corrected within 24 hours

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.

27 Date of

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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

Eros	sion and Sediment	Contro	ol Inspection Report Form
Project Name and	Location 2nd ZC	hester	Nuct T
Weather:			Pollution Control Measures (BMP) Checklist:
Cloudy Rain in last 24 hrs (inches):			4
Rain in last 24 hrs	(inches):		A Inlet Barrier (i.e.: gravel bags)
Owner / Permittee	<u>J</u> #		- Sediment Barriers (i.e.: ditch checks)
Uwher/ Perinnue			Erosion Blankets, Hydromulch / Seed, etc
A Current Const	ruction / Active Areas:		Stabilized Construction Entrance
	m Severon		Seed / Sod Areas
	estnut		Sediment Basins & Discharge Locations
Ch	esinu		Borrow Areas
1			General Site Condition (trash, etc)
			1
B. Problem Area	s / Special Observations(*N	lote proble	m areas ONLY below*):
		1	
BMP	Location	Obser	rvations, Effectiveness, & Corrective Actions Ordere
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			· ·
C Licting of Ar	eas where construction oper	rations hav	ve permanently or temporarily stopped; stabilization
	outflow of ne	ويك تساد	stem
		•	
D. Have items n	oted on last inspection been	corrected	? Yes No (if No, Explain:)
			. ·
			Deficiencies must be corrected within 24 hour
Note: Inspection	a comments above indicate d	ejiciencies	s only. Deficiencies must be corrected within 24 hour insidered to be in good working condition.
uniess otherwise	e noiea. All oiner Divir's on	one are coi	

17.2 5 11

Date of Inspection

acn à 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

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Detention Basin Inspection

Basin Address and Location:		_		
Owner Name and Address:				
Inspection Date:				
Inspected By:				
Are inlet/outlet structures free of debris, trash, sediment, and leaves? Repairs/Comments:	Y D	N 	N/A	Last Maintenance Date
Is rip rap in place and free of sediment? Repairs/Comments:			0	
Are embankments and structures free of trees? Repairs/Comments:				
Are embankments and structures damaged or eroded? Repairs/Comments:				
Is the facility mowed and free of trash? Repairs/Comments:				
is there excess sediment in the basin? Repairs/Comments:	0	0	0	·····
Is the trickle channel damaged by erosion? Repairs/Comments:	0		0	
Is the out flow of water causing damage to adjacent property? Repairs/Comments:			0	
Is there exposed soil with no vegetation growing? Repairs/Comments:	0		0	
Is the facility draining properly according to as built plans? Repairs/Comments:	0			

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	City of Leavenworth Detention/Retention Basin 2022 Inspections					
No.	Detertion	Location	Date			
1.	16 Terrace		4/29			
2.	1028 Madison		4/19			
3.	Armed Forces Bank F	Pond	4/25			
4.	Ben Day Lofts		4/19			
5.	Business Tech Park	4/27				
6.	Calvary Baptist Churc	ch	4/28			
7.	Cereal Ingredients, Ir		4/25			
8.	CoreCivic Company		4/29			
9.	Crown Estates		4/19			
10.	Dillon's Supermarket		4/25			
11.	Eagle Hall		4/19			
12.	Hampton Inn		4/19			
13.	Highland Pointe Subo	livision	4/29			
14.	Hilton Home x Suite		4/19			
15.	Home Depot		4/20			
16.	Leintz Funeral Home	4/28				
17.	Pine Meadow Place					
18.	Shenandoah Subdivi	4/27				
19.	Southwind Subdivision	4/29				
20.	Stove Factory Lofts		4/20			
21.	The Branches Subdiv	vision	4/27			
22.	University of Saint Ma	ary	4/20			
23.	US Army Reserve Ce	enter	4/19			
25.		David Brewer Elementary School				
26.		Anthony Elementary School				
27.	USD 453 Schools	Henry Leavenworth Elementary School	4/19 - 5/2			
28.	000 400 0010013	Richard Warren Middle School	110 012			
29.		Leavenworth High School				
30.	Leavenworth Intermediate Center					
31.	Walmart		4/25			
32.	Westside Church		4/28			
33.	Woods on Muncie Su	5/2				
34.	Zeck Ford	4/20				

ITEM 5 Six Minimum Control Measures (Documentation Continued)

BMP 6 - Municipal Pollution Prevention/Housekeeping

- Street Sweeping
- Salt Use

BMP 7 - N/A for City of Leavenworth

City of Leavenworth KDHE 2022 Annual Stormwater Report

Municipal Service Center 2022 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	
Note: Starting in 2020, the City discontinued					

tracking hours; maintenance is tracked by mileage.

Year	3332	3333	Total Miles
2020	2,400	533	2,933
2021	1,396	723	2,119
2022	1,593		1,593

City has a total of 343 lane miles

City of Leavenworth Municipal Service Center 2022 Salt Usage Data

A	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			

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 violation."

Signature of Perr	nittee:	l	Date Signed: 3-1-23	_
(Legally responsi	ible person)			
Name Printed:	Paul Kramer	Title:	City Manager	

10 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. Submit this report to:

KANSAS DEPARTMENT OF HEALTH & ENVIRONMENT

Municipal Program Section

100 SW Jackson Street, Suite 420

Topeka, Kansas 66612