City of Leavenworth, Kansas

January 1, 2021 - December 31, 2021

Kansas Permit No: M-MO12-SN01

Federal Permit No: KSR044011

February 28, 2022

RESOLUTION NO. B-2308

A RESOLUTION APPROVING THE 2021 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 8, 2022 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 2021 Annual Report for Stormwater reflects the direction, efforts and accomplishments by City of Leavenworth for calendar year 2021. 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 22nd day of February 2022.

CITY OF LEAVENWORTH, KANSAS

Camalla M. Leonhard, Mayor

ATTEST:

Sarah Bodensteiner, CMC, City Clerk

(SEAL)

SEAL OF THE CITY OF LEAVENWORTH KANSAS
CORPORATE SEAL

February 23, 2022

Mr. Jordan A. Beck
KDHE Bureau of Water
1000 SW Jackson, Suite 420
Topeka, KS 66612-1367

RE: **2021 KDHE Report on Stormwater**
City of Leavenworth

Please find the following submitted for compliance with 2021 Annual Report for Stormwater.

- CD containing final report with signed certification and the PDF file of Leavenworth stormwater system and outfalls, and other structures.

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

Sincerely,

Brian D. Faust
Director of Public Works

Postage Receipt

UNITED STATES POSTAL SERVICE.

LEAVENWORTH
330 SHAWNEE ST
LEAVENWORTH, KS 66048-9998
(800)275-8777

02/23/2022 04:36 PM

Product	Qty	Unit Price	Price
First-Class Mail® Package Topeka, KS 66612 Weight: 0 lb 3.30 oz Estimated Delivery Date Sat 02/26/2022 Tracking #: 9500 1154 1992 2054 5888 66	1		$4.50
Grand Total:			$4.50
Credit Card Remitted Card Name: VISA Account #: XXXXXXXXXXXX7201 Approval #: 029039 Transaction #: 662 AID: A0000000031010 AL: VISA CREDIT PIN: Not Required		Chip	$4.50

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CITY OF LEAVENWORTH

Kansas Stormwater Annual Report Form for
Municipal Separate Storm Sewer Systems (MS4)
January 1, 2021 - December 31, 2021

TABLE OF CONTENTS

Section A
Local Government Information

DVD Submitted to KDHE

- Copy of this Report
- Copy of 2020 Stormwater Management Program
- PDF of Stormwater System Showing Inlets, Outfalls and other Information

KANSAS STORMWATER 2021 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, 2021 through December 31, 2021. This annual report must be submitted to the Kansas Department of Health and Environment (KDHE) by February 28th, 2022. The annual report is to be submitted as PDF files to KDHE preferably on a standard compact disk (CD) or digital versatile disk (DVD). If the permittee does not have the ability to provide the files in a CD or DVD, a flash drive can be submitted. Some permittees provide additional hard copy submissions of the annual report or supplemental documents along with the electronic files. There is no requirement to provide hard copies of any documents other than a simple transmittal letter.

Item 2

Executive Summary

SECTION 1: 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 2021, and examining communications and publications made available to the citizens of Leavenworth.

The COVID-19 Pandemic continued to impact the City of Leavenworth activities through 2021. These impacts included sudden absences of key persons and the inability to fill vacant positions in our Operations Division.

City staff pursue 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.
    - Street sweeping is an effective tool for removing pollutants.
    - Use of "Stormwater Utility" funds to address long-standing small to medium-sized 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 having 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.

- **What was the most challenging aspect of the program?**
  The most challenging was having developers install and maintain construction site runoff control. To address this issue, the City issued a stop-work order for a residential development due to failure to install required measures. While the issues were immediately corrected, this is an area that requires continual observation to help ensure compliance.

- **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 10, 2021.
  - 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 June.
  - The City has a "Three-Mile Creek" monthly clean-up program in which citizens pick up trash. In 2021, there were six citizen groups that received a $500 donation per group from transient guest tax dollars in 2021.

- **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 problems in the community, typically including reduction or elimination of erosion that has been causing failed roadways, culverts and streambanks. The Commission has also supported staff goal to have all public and private projects have 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.
  - Leavenworth County provided one HHW (Household Hazardous Waste) collection service in June 2021.

- **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 2021.

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/2021-kdhe-annual-stormwater-report

- Policy Report No. 21-06 - *Review Draft of 2020 KDHE Annual Stormwater Report (February 9, 2021)*
- Policy Report No. 21-10 - *Review Final Draft of 2020 KDHE Annual Stormwater Report and Adopt Resolution No. B-2277 (February 23, 2021)*
- Resolution No. B-2277 - *Resolution Approving the 2020 KDHE Annual Stormwater Report (February 23, 2021)*
- 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-XXXX (February 22, 2022)*
- Resolution No. B-XXXX - *Resolution Approving the 2021 KDHE Annual Stormwater Report (February 22, 2022)*

POLICY REPORT PWD NO: 21-06

REVIEW DRAFT 2020 KDHE ANNUAL REPORT FOR STORMWATER

February 9, 2021

Prepared by:

Michael G. McDonald, P.E.,
Director of Public Works

Submitted by:

Paul Kramer,
City Manager

ISSUE:

Review the draft of the annual KDHE report for 2020 stormwater activities.

BACKGROUND:

The City of Leavenworth is regulated by the Kansas Department of Health and Environment (KDHE) and US Environmental Protection Agency (EPA) as a Phase II City for stormwater purposes. The City has been required to submit an annual report on stormwater activities every year since 2003. The report is to summarize the actions the City has taken the previous year (2020) to protect and enhance stormwater quality. The guidelines for the activities to be reported on are set by the KDHE.

This report will be the last in this style. The new Stormwater Permit issued in 2019 will be in effect through 2024. The City Commission approved the new Stormwater Management Program in October of 2020. The new permit allows for this Annual Report format to be used for the final report related to the activities of the previous permit.

The City has submitted annual reports in accordance with KDHE requirements in previous years. Interaction with KDHE and EPA suggest that the annual report be reviewed in a public forum rather than simply submitted by staff.

The attached documents are a draft of the key portions of the annual report for 2020. There will be additional supporting information in the appendices when the report is submitted by February 28, 2021.

Staff is requesting comments and suggestions from the City Commission related to the content of the report. It is appropriate for the City Commission to seek input from the

public on this matter as well. Staff will review comments and questions received for inclusion in the final document. The report is due at KDHE on February 28, 2021 via digital delivery. It is recommended the City Commission adopt a resolution supporting the final report at the February 23, 2021 Commission Meeting.

Key narratives in the report are shown below. Important changes reflect the impact the COVID-19 virus has had on City and resident activities related to stormwater.

KEY SECTIONS of the REPORT

- Executive Summary
- 6 Minimum Control Measures: Discussion on effectiveness and annual performance measures.
    - Public Education and Outreach
    - Public Involvement and Participation
    - Illicit Discharge Detection and Elimination
    - Construction Site Stormwater Runoff and Control
    - Post Construction Stormwater Management in New Development and Post Development Projects
    - Pollution Prevention and Good Housekeeping

RECOMMENDATION:

Staff recommends that the City Commission and the Public provide comments on the draft document verbally, in writing or via email.

ATTACHMENT:

- Draft 2020 Report (partial)
    - Executive Summary
    - Comments on Part V
    - 6 Minimum Control Measures: Discussion on effectiveness and annual performance measures
- KDHE Annual Report for 2019 – link here: https://www.leavenworthks.org/publicworks/page/kdhe-annual-stormwater-report
- Revised Stormwater Management Program - link here: https://www.leavenworthks.org/publicworks/page/engineering

POLICY REPORT PWD NO. 21-10

REVIEW FINAL DRAFT 2020 KDHE ANNUAL REPORT FOR STORMWATER AND ADOPT RESOLUTION NO. B-2277

February 23, 2021

Prepared by:

Michael G. McDonald, P.E.,
Director of Public Works

Submitted by:

Paul Kramer,
City Manager

ISSUE:

Adopt a resolution approving the annual KDHE report for 2020 stormwater activities.

BACKGROUND:

The City of Leavenworth is regulated by the Kansas Department of Health and Environment (KDHE) and US Environmental Protection Agency (EPA) as a Phase II City for stormwater purposes. The City has been required to submit an annual report on stormwater activities every year since 2003. The report is to summarize the actions the City has taken the previous year to protect and enhance stormwater quality. The guidelines for the activities to be reported on are set by the Stormwater Management Program (SMP) which was adopted by the City Commission in 2016. Future reports will be based on the guidelines set by the new SMP (2020-2024) that was adopted by the City Commission on October 27, 2020.

The City has submitted reports in accordance with KDHE requirements in previous years. Interaction with KDHE and EPA suggest that the report be reviewed in a public forum rather than simply submitted by staff. The draft report was reviewed by the Commission on February 9th, 2021. No other comments were received.

The final report includes statements that the City has reduced pollution in accordance with the requirements to the "Maximum Extent Practicable" (MEP). MEP can be used as a legal term; however, there is no single definition of what it means in individual situations. Staff opinion is that the City has met the intent of the regulations to reduce pollution through the Six Minimum Control Measures as described in the report.

There is considerable additional information in the appendices that will be included when the report is submitted.

RECOMMENDATION:

The report is due at KDHE on February 28th via digital delivery. It is recommended the City Commission adopt the resolution supporting the final report at the February 23rd Commission meeting.

ATTACHMENT:

Final Draft Report (partial)

- Executive Summary
- Comments on Section V of the Permit (Final Report)
- Section E - Stormwater Management Program Requirements (Six Minimum Control Measures)
- Links – Final Draft KDHE Report for 2020:
  https://www.leavenworthks.org/publicworks
  Previous KDHE Annual Reports:
  https://www.leavenworthks.org/publicworks/page/annual-stormwater-reports

RESOLUTION NO. B-2277

A RESOLUTION APPROVING THE 2020 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 9, 2021 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 2020 Annual Report for Stormwater reflects the direction, efforts and accomplishments by City of Leavenworth for calendar year 2020. 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 23rd day of February 2021.

CITY OF LEAVENWORTH, KANSAS

Nancy D. Bauder

Nancy D. Bauder, Mayor

ATTEST:

Carla K. Williamson

Carla K. Williamson, CMC, City Clerk

(SEAL)

SEAL OF THE CITY OF LEAVENWORTH KANSAS CORPORATE SEAL

POLICY REPORT PWD NO: 22-11

REVIEW DRAFT 2021 KDHE ANNUAL REPORT FOR STORMWATER

February 8, 2022

Prepared by:

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

Submitted by:

Paul Kramer,
City Manager

ISSUE:

Review the draft of the annual KDHE report for 2021 stormwater activities.

BACKGROUND:

The City of Leavenworth is regulated by the Kansas Department of Health and Environment (KDHE) and US Environmental Protection Agency (EPA) as a Phase II City for stormwater purposes. The City has been required to submit an annual report on stormwater activities every year since 2003. The report is to summarize the actions the City has taken the previous year to protect and enhance stormwater quality. The guidelines for the activities to be reported on are set by the revised Stormwater Management Program (SMP) which was adopted by the City Commission on October 27, 2020 and these guidelines were used in 2021.

The City has submitted reports in accordance with KDHE requirements in previous years. Interaction with KDHE and EPA suggest that the report be reviewed in a public forum rather than simply submitted by staff. The attached documents are a draft of the key portions of the annual report for 2021. There will be additional supporting information in the appendices when the report is submitted.

Staff is requesting comments and suggestions from the City Commission related to the content of the report. It is appropriate for the City Commission to seek input from the public on this matter as well.

The current KDHE stormwater permit is in force from November 2019 through October 2024.

Key narratives in the report are:

- Executive Summary
- 6 Minimum Control Measures: Discussion on effectiveness and annual performance measures.
    - Public Education and Outreach
    - Public Involvement and Participation
    - Illicit Discharge Detection and Elimination
    - Construction Site Stormwater Runoff and Control
    - Post Construction Stormwater Management in New Development and Post Development Projects
    - Pollution Prevention and Good Housekeeping

RECOMMENDATION:

The information is presented in draft form. We are looking for any comments or questions the Commission may have as well as the public on the efforts that we've taken over the last year.

The report is due at KDHE on February 28, 2022 via digital delivery. It is recommended the City Commission adopt a resolution supporting the final report at the February 22, 2022 Commission meeting.

ATTACHMENTS:

- Draft 2021 Report (partial)
    - Executive Summary
    - Six Minimum Control Requirements
    - Comments on Part V
- Maps
    - Stormwater with Creek Basins
    - Stormwater Management Data Collection
- KDHE Annual Report for 2020 – link here: https://www.leavenworthks.org/publicworks/page/kdhe-annual-stormwater-report
- Revised Stormwater Management Program - link here: https://www.leavenworthks.org/publicworks/page/engineering

POLICY REPORT PWD NO. 22-13

REVIEW FINAL 2021 KDHE ANNUAL REPORT FOR STORMWATER AND ADOPT RESOLUTION NO. B-xxxx

February 22, 2022

Prepared by:

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

Submitted by:

Paul Kramer,
City Manager

ISSUE:

Adopt a resolution approving the annual KDHE report for 2021 stormwater activities.

BACKGROUND:

The City of Leavenworth is regulated by the Kansas Department of Health and Environment (KDHE) and US Environmental Protection Agency (EPA) as a Phase II City for stormwater purposes. The City has been required to submit an annual report on stormwater activities every year since 2003. The report summarizes actions the City has taken the previous year to protect and enhance stormwater quality.

KDHE and EPA suggest that the report be reviewed in a public forum rather than simply submitted by staff. The draft report was reviewed by the Commission on February 8th, 2022 and is available on the City's website. One email was received regarding stormwater issues along Vilas Street (attached).

The final report includes statements that the City has reduced pollution in accordance with the requirements to the "Maximum Extent Practicable" (MEP). Staff opinion is that the City has met the intent of the regulations to reduce pollution through the Six Minimum Control Measures as described in the report.

There is considerable additional information in the appendices that will be included when the report is submitted.

RECOMMENDATION:

The report is due at KDHE on February 28th via digital delivery. It is recommended the City Commission adopt the resolution supporting the final report at the February 22nd Commission meeting.

ATTACHMENTS:

- Final Draft Report (partial)
  - Executive Summary
  - Comments on Section V of the Permit (Final Report)
  - Section E - Stormwater Management Program Requirements (Six Minimum Control Measures)
  - Links – Final Draft KDHE Report for 2021: https://www.leavenworthks.org/publicworks/page/2021-kdhe-annual-stormwater-report
  - Previous KDHE Annual Reports: https://www.leavenworthks.org/publicworks/page/annual-stormwater-reports

- Email from resident along Vilas Street

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).

TOPICS REQUIRED TO BE ADDRESSED IN THIS REPORT AS IDENTIFIED IN PART V OF THE PERMIT

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. The global pandemic in 2020 and 2021 restricted the number and size of public meetings. This impacted 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, BMP operation (particularly detention basins) annual meeting 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. Participation in individual programs may have been reduced during the year due to COVID.

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

Key programs associated with stormwater activities, all of these programs were conducted in 2021 as noted. 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
- ✓ BMP annual meeting
- ✓ 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

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

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 2021.

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

There were no significant changes to the BMPs in 2021.

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

There were no ordinance or resolutions updated in 2021 associated with the SMP.

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

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

Sections A, B, C & D

- KDHE Stormwater 2021 Annual Report

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 thecommunity 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.

This section intentionally left blank

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 byeither 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?
☐	☒	☐	Has the SMP been modified or updated during this reporting period?
☐	☐	☒	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).
☐	☐	☒	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. TMDL BMP Table — Please fill out accordingly

BMP ID NUMBER	BRIEF BMP DESCRIPTION	REGULATED TMDL PARAMETERS	MEASURABLE GOAL(S)	PROGRESS ACHIEVING GOAL(S) (MEASURED RESULT)

City Not Required to Report

Section E

Stormwater Management Program Requirements

(Sections E1 - E6)

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

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)

1. PUBLIC EDUCATION & OUTREACH (ED & O)			2021 4 Points Total	
BMP Program	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS Value	POINTS Actual
ED & 0 - 01	Maintain a stormwater webpage for the permittee.	Stormwater webpage - https://www.leavenworthks.org/citymanager/page/stormwater-projects	3	3
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.	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/stormwater-education	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; however, did not meet the 10% threshold in 2021.	2	
ED & 0 - 05	Post the municipality's MS4 permit and SMP document on either the stormwater webpage or the municipal webpage.	SMP - https://www.leavenworthks.org/publicworks/page/engineering MS4 Permit - https://www.leavenworthks.org/publicworks/page/engineering	1	1
ED & 0 - 12	Create a stormwater information brochure to provide to the public at public meetings and/or hearings.	The City utilizes MARC brochures; however, due to COVID restrictions and corresponding limited public meetings the City did not meet the public threshold in 2021.	1	
ED & 0 - 15	Hold a social media campaign addressing various pertinent stormwater public education topics.	Stormwater information has been published through social media, but does not meet the threshold in 2021 to acquire the points.	2	
		TOTAL	13	4

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)

2. PUBLIC INVOLVEMENT/PARTICIPATION (P I/P)			**2021**	
			3 Points Total	
BMP Program	**BRIEF BMP DESCRIPTION**	**MEASURABLE GOAL(S)**	**POINTS**	
			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 8, 2022. The meetings were also broadcast on the City's channel cable TV station and YouTube. City Commission reviewed stormwater projects for CIP in 2021, and approved design and construction of several projects. List and stormwater-related documents are at: https://www.leavenworthks.org/citymanager/page/stormwater-projects	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 10, 2021. 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 in June.	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 in which citizens pick up trash. In 2021, there were six citizen groups that received a $500 donation per group from transient guest tax dollars in 2021.	3	3
		TOTAL	**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	
☒	☐	☐	Has a program/plan been developed and is it presently implemented to detect and address illicit/prohibited discharges into the MS4?
☒	☐	☐	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?
☐	☒	☐	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:
☐	☒	☐	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.

This section intentionally left blank

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.

3. ILLICIT DISCHARGE DETECTION & ELIMINATION (I D D & E)			2021 5 Points Total	
BMP Summary	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS 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 does not meet the threshold in 2021 to acquire the point.	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 does not meet the threshold for 2021 to acquire the points.	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 June.	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 3,149 inlets and area drains and other stormwater facilities. Number inlets cleaned - 871, number inlets vacuumed - 92	3	3
		TOTAL	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	
☒	☐	☐	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
☒	☐	☐	Has a copy of the ordinances or resolutions been submitted to KDHE as required by the permit?
☒	☐	☐	Has a procedure or program been developed requiring construction site owners and/or operators to implement appropriate erosion and sediment control best management practices?
☒	☐	☐	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 atconstruction 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 andconsideration of information submitted by the public?
☒	☐	☐	Has a procedure been developed and implemented forconstruction 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.

4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (CSSRC)			2021 4 Points Total	
BMP Program	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS	
			Value	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.	3	3
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 APWA erosion control BMPs. Not taking points in 2021.	3	
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
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
		TOTAL	10	7

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

c. Post-Construction Site Stormwater Management in New Developmentand Redevelopment

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

YES	NO	N/A	
☒	☐	☐	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.

This section intentionally left blank

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.

5. POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT & REDEVELOPMENT PROJECTS (P-C SM)			2021 5 Points Total	
BMP Program	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	POINTS	
			Value	Actual
P-C SM - 01	Develop and adopt a custom design manual for Post-Construction Stormwater Management which specifies various structural BMPs which are required for new development and re-development construction sites which are greater than one acre or for which there is construction activity disturbing less than one acre which is part of a larger common plan of development or sale that in total disturbs one acre or more. (Points shown reflect adopting existing APWA/MARC manuals.)	Link to APWA/MARC manuals posted at City's website: https://www.leavenworthks.org/publicworks/page/public-education-brochures Link to the City of Leavenworth Manual of Infrastructure Standards: https://www.leavenworthks.org/publicworks/page/engineering Note: the permit allows six points for adopting the APWA/MARC manuals. The City is taking five points, per the permit, for subsequent years.	4	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.	Currently developing a program.	3	
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.	Documentation of inspection and communication - 2021 Detention Basic Public Meeting. Attendees were given a packet containing the meeting agenda, a basic overview of detention basin maintenance, examples of an emergency spill plan, and an inspection form. City spent 84 hours conducting inspections of selected sites on random, after rainfall, or with depth-recording equipment.	3	3
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.	City continues outreach to detention basin BMP owners. A meeting was held March 14, 2021 with 10 attendees who were given a packet containing the meeting's agenda, a basic overview of detention basin maintenance, examples of an emergency spill plan and an inspection form. This effort will continue and expand. Currently there are 68 BMP sites.	3	3
		OTAL	**13**	**11**

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.

YES	NO	N/A	
☒	☐	☐	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.

6. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS (PP/GH)			2021 5 Points Total	
BMP Program	BRIEF BMP DESCRIPTION	MEASURABLE GOAL(S)	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
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.	While staff does this, not claiming points in 2021.	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. City currently has only one sweeper in operation; **the second sweeper became inoperative in mid-June, 2021. • **Sweeper No. 3332 from Jan-Dec**: **Sweeper No. 3333 from Jan-Jun 11**: Miles of streets swept - 1,396.2 Miles of streets swept - 723	3	3
PP/GH - 07	Implement a program to inspect stormwater inlets to identify illicit discharges and clean drop inlets of accumulated debris.	Stormwater crew inspected and/or maintained approximately 3,149 inlets and area drains and other stormwater facilities. Number inlets cleaned - 871, number inlets vacuumed - 92	1	1
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/ Map published previously, so taking two points per permit.	3	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; not taking points in 2021.	3	
		TOTAL	15	8

Section F

No Surface Water Testing Required in 2021

Section G

Certification

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 Permittee: _____ **Date Signed** 2/23/22

(Legally responsible 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 Programs Section

100 SW Jackson Street, Suite 420

Topeka, Kansas 66612

Appendix A
Summary of Sampling Data

City was released from sampling requirements for 2019.

Appendix B
TMDL
N/A

No TMDL monitoring required. Stream monitoring information not required in 2021.

Appendix D

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report - Section E) (BMP Numbers 1 & 2)

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

- Public Information
  - City Newsletter Stormwater-Related Articles
    a. Arbor Day Ceremony
    b. Legacy Tree Program
    c. 2021 Spring Cleanup Flyer and Documents
    d. Policy Report - *City-Wide Spring Cleanup Planning for 2021 (February 16, 2021)*
  - Erosion-Control and Informational Brochures which can be found at: https://www.leavenworthks.org/publicworks/page/public-education-brochures (examples attached)
    a. 10 Native Plants for the Kansas City Regions
    b. Compost and Yard Waste
  - City Commission Agenda - Table of City Commission Policy Reports and Minutes Related to Stormwater Management Program, KDHE Annual Stormwater Report, and City Stormwater Projects. Individual documents can be found at: https://www.leavenworthks.org/publicworks/page/2021-kdhe-annual-stormwater-report-supporting-documents

First City Connection

Summer 2021

INSIDE:

Special Events

Annual Special Events – Watch our website for details as time draws near.

Spring Events

• **Arbor Day Celebration** – On the last Friday in April, Parks staff plants a tree to honor a local individual or group. Tree planting time and location will be announced on the City's website.

• **Touch-A-Truck** – The first Wednesday in May, bring the kids to this free event at Leavenworth Landing Park and see the many kinds of trucks working in and around our community. Kids get a hands-on opportunity to explore, crawl through and even honk the horn of the hard-working big rigs of the City and surrounding communities. Stop in the gym at Riverfront Community Center (south entrance) and check out the bounce houses, toys, music and free popcorn. Then head across the street to the Carousel Museum for free rides. Event is from 10 a.m. to 11:30 a.m.

Summer Events

• **Dad and Me Campout -** Join us at Wollman Aquatic Center for a night under the stars the second Saturday in June! Pitch your tent in the grassy area and then enjoy an evening of swimming, s'mores, and games. Breakfast is served the next morning. Limit 20 tents. Charge is based on an average 4-person tent, about 60 square feet. Event starts at 8 p.m. Saturday night and end at 8 a.m. on Sunday morning. Fees: $25 for one tent with one adult and one child; $5 for each additional guest in the same tent.

• **Dive-In Movie** - Join us the last Saturday in July as we bob along and watch a movie from the pool at Wollman Aquatic Center. A great way to keep cool on a hot summer night. For your enjoyment, the concession stand will be open and selling your favorite snacks and beverages. Please, no outside food or drink inside the pool area. Space is limited. Cost is $6/person. Gates open at 8:00 p.m. and the movie begins at 8:30 p.m.

• **Annual Doggie Splash** – On the Tuesday after Labor Day, bring your canine companions to the annual Doggie Splash at Wollman Aquatic Center. Cost is $5/dog. Proceeds benefit the Waggin' Tails Dog Park.

Leavenworth Parks and Recreation
123 S. Esplanade
Leavenworth, KS 66048

**********ECRWSSEDDM****

Postal Customer
Leavenworth, KS 66048

PRE-SORT STANDARD
ECRWSS
U.S. POSTAGE PAID
Leavenworth, KS
Permit No. 67

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.

Park Programs
Legacy Trees - 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. Supporters will be able to see their contributions live on in each tree that is planted — a gift that keeps giving! 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. 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. Placement in another park must be approved by the Park Superintendent. 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 – Consider adopting a Leavenworth city park or other landscaped public area. Participants can choose from a variety of tasks to include establishing a presence in the parks and reporting vandalism and maintenance problems, picking up litter, painting, weeding or gardening. Donations also may be made for park improvements. City staff will provide guidance and some materials for projects. Choose a park and decide what activities you will be able to do and how often. Once this is established, a sign will be erected in the park with your group's name and logo. See which parks are available and register through our website at www.leavenworthks.org/parksrec.

Shelter Rentals
We have 14 shelters available for rent at 10 of our parks. See our chart for parks and amenities. You can now reserve and pay for these online through Eventbrite (convenience fees apply). Visit www.leavenworthks.org/parksrec for details and the link to online payment. You may also reserve in person at the Parks and Recreation Administrative office, Monday – Friday, 8 a.m. to 5 p.m.

Paddlewheel Plaza: Even before the pandemic, many of our community members have utilized this section of the Leavenworth Landing Park overlooking the Missouri River for special events. Contact our staff about reserving this space for your special event, e-mail parksandrec@firstcity.org.

Alcoholic Beverage Permit
By City ordinance, alcoholic beverages are prohibited in City parks, except as authorized by Parks and Recreation to Leavenworth County residents with a park reservation permit. There is a $10 alcoholic beverage or beer permit fee. Visit our website for details and restrictions.

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 are $15/hour ($20/hour for non-residents) with a $100 refundable damage deposit. Fees are due when a permit is requested. Choose the Paddlewheel Plaza and add the Bridge Tender's Building for $20, or choose 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. City residents or businesses pay $25 per 8-hour session, and non-residents pay $50. Sessions available are 6 a.m. – 2 p.m. or 3 p.m. – 11 p.m. 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.

Policy Report

Citywide Spring Cleanup planning for 2021
Feb. 16, 2021

Prepared by:	Approved by:	Approved by:
Melissa Bower, PIO	Taylour Tedder, Assistant City Manager	Paul Kramer, City Manager

The City of Leavenworth would like to hold a pandemic-friendly Citywide Spring Cleanup on April 10, 2021. City staff are confident that with the public's increase in knowledge about how to prevent the spread of the pandemic, we can safely hold this event to keep our city streets clean. This event also benefits our children by teaching them how small acts can make a difference in our community. With the general consensus of the City Commission, staff will begin marketing this event.

- We would not hold a kick-off event. Volunteer trash pick-up teams would meet at their respective locations at 9 a.m. April 10.
- The City will provide packages for each team with t-shirts, trash bags, disposable face masks and gloves. We need volunteers to sign up by March 26 to receive a free t-shirt, but everyone will get a face mask, gloves and trash bags and set of instructions (attached).
- Services offered to residents on Saturday, April 10 include open Brush Site, Recycling Center, Large Item Drop-Off and Electronics Recycling. We coordinate with the Leavenworth County Transfer Station once a year during the Spring Cleanup to provide Household Hazardous Waste drop-off at the Municipal Service Center.
- Citizens Savings and Loan is excited to partner with us again for the citywide paper shredding event that takes place at both bank locations. The bank staff will wear facial coverings as they volunteer to help those in vehicles dispose paper to shred. The Solid Waste Division will provide a staff member on-site to help with disposal items such as plastic bags or boxes that cannot be shredded.
- Bill McKeel at the Fire Department has leftover face masks from community give-aways and can order more if needed.
- Staff are researching options to provide doughnut gift certificates to give out to teams in advance.

Team instructions

Thank you for participating in the Leavenworth Citywide Spring Cleanup 2021. We are so thrilled to have you back and volunteering again after the pandemic forced us to cancel the 2020 event. Thank you very much to our team leaders and volunteers. Your efforts to help pick up trash throughout the city are very important. Removing trash from streets and parks not only helps our city look cleaner, but also prevents trash from entering our streams and rivers.

Face masks, gloves and trash bags are included for you. Items should be bagged as much as possible. Please do not pick up broken glass or sharp objects. For those cleaning up today, April 10, there are two options for full trash bags:

1) Haul full bags to the Municipal Service Center, 780 Thornton. Make sure you tell staff it's part of the Citywide Spring Cleanup.

2) Leave full bags on a street corner and call Melissa Bower at 913-306-2900 or e-mail melissab@firstcity.org Please call me if you need any additional items such as trash bags, face masks, gloves or more t-shirts.

10 Natives for the Kansas City Region

The following are 10 common species of plants, flowers and trees that grow well in the weather conditions of our region. The plants below are attractive and garden-worthy native plants that are recognized by Powell Gardens as Plants of Merit.

Bluestar
Amsonia tabernaemontana
Star-shaped, powdery-blue flowers that bloom in clusters in spring atop generally upright stems densely clothed with feathery, soft-textured, almost thread-like leaves. The unique foliage remains green throughout summer, but changes to gold in fall. Foliage clumps grow to 3 feet tall, with stems cascading as the season progresses. Mass or group for best foliage display. Easily grown in borders, open woodland areas and native plant gardens.

Blue False Indigo
Baptisa australis
Erect stalks of blue, lupine-like flowers cover this native perennial in spring. Flowers give way to inflated black seed capsules valued for use in dried arrangements. Plants become shrubby after bloom, displaying attractive, clover-like blue-green leaves. Early Americans used the plant as a substitute for true indigo in making blue dyes. Grow as a specimen or in groups in borders, or naturalize in cottage gardens, prairie areas, meadows or native plant gardens.

Willowleaf Sunflower
Helianthus salicifolius
Easily grown in average, medium-wet, well-drained soil in full sun. Tolerant of wide range of soil conditions. If grown in part shade, plants tend to be taller and more open, produce fewer flowers and require support. Spreads over time by creeping rhizomes to form dense colonies. Divide every 3–4 years to control invasiveness and maintain vigor.

Smooth Hydrangea
Hydranagea arborescens
Flattened clusters of dull white flowers appear in early summer on this native shrub. Prompt removal of spent flower heads may promote a late summer rebloom. Oval, serrate, dark green leaves are attractive throughout the growing season. Best form in formal garden areas may be achieved by cutting back stems each year to 12 inches in late winter. If cut back, this shrub will still grow to 3–5 feet tall in a single season. Perhaps best naturalized in native plant or woodland gardens.

Spicebush
Lindera benzoin
A tough, broad, rounded native shrub that grows 6–12 feet tall. This is an attractive selection for shrub borders, open woodland gardens or along stream/pond edges. Fragrant, yellow flowers bloom along the branches in early spring before the foliage emerges. Female plants produce bright red berries in autumn. Light green leaves turn yellow in autumn. Leaves are spicily aromatic when crushed.

Cardinal Flower
Lobelia cardinalis
This native is noted for its intense red flowers, late summer bloom and ability to thrive in moist, shady locations. Densely packed two-lipped cardinal red flowers bloom in erect flowering spikes typically growing 2–4 feet tall from July to September. Good for open shady border areas, wildflower gardens, shade/woodland gardens or stream/pond margins. Flowers are attractive to butterflies and hummingbirds.

Ninebark
Physocarpus opulifolius
This tough, thicket-forming native deciduous shrub grows 5–8 feet tall with gracefully arching branches. Year-round ornamental features include spirea-like clusters of pinkish to white flowers in spring; lobed dark green leaves in summer and inflated capsule-like fruits that mature in autumn. The exfoliating reddish-brown bark, for which this plant is named, is best observed after leaf drop and throughout winter. Good for shrub borders, open woodland areas and naturalized areas.

Fringe Tree
Chionanthus virginicus
This native fringe tree is named for its outstanding airy clusters of slightly fragrant spring flowers with fringe-like, drooping, creamy white petals. Flower petals flutter gracefully in just a hint of breeze. It typically grows as a large shrub or small tree to 12–20 feet tall. Birds delight in the grape-like fruit which matures in late summer. Its wide spear-shaped leaves turn an attractive yellow in autumn. An excellent specimen plant.

Christmas Fern
Polystichum acrostichoides
The fronds are green at Christmas and each individual leaflet suggests the shape of a Christmas stocking. This native evergreen fern forms a distinctive fountain-like clump of leathery, lance-shaped fronds. Clumps typically grow to 2 feet tall and slowly spread by rhizomes to provide excellent evergreen color for shaded garden areas.

Sourgum
Nyssa sylvatica
Although native to lowlands, this stately tree does exceedingly well as a residential landscape shade tree. It matures to 30–50 feet tall with a straight deeply textured trunk and rounded crown. Handsome dark green summer foliage gives way to spectacular orange-scarlet-purple fall color. Female trees produce dark-blue oval fruits that are quite attractive to birds and wildlife. Performs well in moist low spots.

Photos courtesy of Missouri Botanical Gardens
PlantFinder/PlantsofMerit

Each of these plant species should be readily available at your local lawn and garden store or nursery. For more information about native landscaping in the Kansas City region, please visit www.grownative.org or www.plantsofmerit.org. For information about how landscaping with natives can help improve water quality, please visit www.marc.org/Environment/Water.

Plants of Merit

MARC Mid-America Regional Council

www.marc.org/Environment/Water

Compost and Yard Waste

What can/can't go in my compost bin? • Mulching Grass and Leaves • Composting Services

What is compost?

Compost is a decayed mixture of plant waste that is used to improve the soil in gardens and yards. You can make compost from yard waste, food waste or both. Yard waste and food waste account for about 20–30 percent of your household's waste stream.

What's the problem with yard and food waste?

Landfilling — When yard waste and food waste end up in the landfill they take up space, create water pollution (leachate), and air pollution (methane). In the first two decades after its release, methane is 84 times more potent than carbon dioxide as a greenhouse gas contributing to climate change. Additionally, yard waste is banned from landfills in many parts of the Kansas City region.

Burning — Burning yard waste at home is also an unhealthy disposal method; it causes air pollution by releasing carbon dioxide and nitrogen oxide, poses fire hazards and is a nuisance for neighbors.

Dumping — Dumping lawn refuse into the street causes a number of problems. Piles of leaves purposely blown into roads can clog storm drains, contributing to flooding risks. And when grass clippings and yard trimmings treated with chemical fertilizers enter storm drains, they are deposited directly into our streams and rivers, posing health risks to people, wildlife and the environment.

If you have a yard, set up a backyard compost bin

1. **Select suitable space and size:** Select a dry, shady, or partly shady spot near a water source and preferably out of neighbors' sight. Ideally, the compost area should be at least one cubic yard in size.
2. **Get a bin or start a pile:** A pile works great for just leaves and grass clippings, but when you want to incorporate food waste, it's time to use a bin to prevent rodents and pets from invading. You can build your own bin or purchase one online or at retail locations. You'll also need a kitchen compost bin so you can collect and store your food waste before taking it to your backyard pile.
3. **Mix it right:** There are four types of ingredients you need to make great compost: browns for carbon, greens for nitrogen, air for organisms and water for moisture. See "What can go in my compost bin?" for a list of green and brown materials you can use. Mix as follows:
   - **a.** Add your brown and green materials (generally three parts brown to one part green), making sure larger pieces are chopped or shredded.
   - **b.** Every time you add to the pile, turn over and fluff it with a pitchfork or shovel to provide aeration, unless your bin has a turner.
   - **c.** During dry weather, add water to keep the pile moist. A good rule-of-thumb is the sponge test: your compost should have the consistency and moisture content of a wrung-out sponge when you squeeze it.

If you don't have a yard, set up an indoor compost bin

1. **Get a bin:** Two options for indoor composting are vermicomposting and bokashi composting. Vermicomposting uses earthworms to convert food waste into compost. Bokashi composting involves fermenting food waste.
2. **Use it:** If you don't have an outdoor space to use your compost, use it for houseplants, give it to friends and family members, or contact a nearby community garden.

Note: Vermicomposting and bokashi composting accept limited types of materials. Use only materials recommended.

Vermicomposting kit: some assembly required.

What can go in my compost bin?

YES*

- Raw or cooked fruits and vegetables
- Bread and grains
- Coffee grounds and filters
- Grass clippings
- Paper tea bags
- Hair and fur
- Chicken, rabbit, cow and horse manure
- Cotton or wool rags
- Dryer and vacuum cleaner lint
- Eggshells
- Nut shells
- Fireplace ashes (from wood burning)
- Sawdust
- Hay and straw
- Yard trimmings (e.g., leaves, branches, twigs; EXCEPT Black Walnut)

- Houseplants
- Used potting soil
- Wood chips
- Shredded newspaper
- Cardboard rolls
- Clean paper

NO

- Metal
- Glass
- Plastic
- Dairy products
- Fats, grease, lard or oils
- Greasy or oily foods
- Meat or seafood scraps
- Bones and shells
- Pet wastes (e.g., dog or cat feces, soiled cat litter)
- Soiled diapers
- Stickers from fruits or vegetables
- Black walnut tree leaves or twigs
- Yard trimmings treated with chemical pesticides
- Roots of perennial weeds
- Coal or charcoal ash
- Firestarter logs
- Treated, stained or painted wood

Vermicomposting and bokashi composting accept limited types of materials. Use only materials recommended.

Mulch your grass and leaves

The best food for your lawn is your lawn and leaves! When you mow your yard, mulch your grass and leaves instead of collecting them for disposal. When done properly, mulched grass and leaves quickly decompose and return nutrients to the soil naturally.

Benefits:

- Provides a natural lawn fertilizer.
- Saves time and effort bagging.
- Saves money on water, fertilizer, bags and disposal costs.
- Helps prevent weed growth
- Conserves water and protects waterways from runoff pollution.

How to mulch your grass:

- Cut grass with sharp blade, mulching blade is ideal.
- Cut grass when it's dry.
- Take grass catcher off mower.
- Cut no more than 1/3 of the grass height at any one time.

How to mulch your leaves:

- Cut leaves with sharp blade, mulching blade is ideal.
- Mulch leaves when they are dry.
- Take grass catcher off mower.
- Set front wheels on highest level (this allows leaves in, but not out).
- Mow over leaves 1-2 times or until leaf clutter is reduced to dime-size pieces.

Send it off-site

Food Waste:

- **Drop-off:** You can take your food scraps to:
  - Compost Collective's **Bin Swap Program**
  - KC Can Compost's **residential subscription drop-off program**
  - URBAVORE Urban Farm's **Residential Composting Program**
- **Pickup:** **Compost Collective KC** and **Food Cycle KC** provide curbside food waste pick up. Check to see if they serve your zip code.

Yard Waste:

- **Drop-off:** Bringing your lawn and garden refuse to a community collection center is another way to divert useful organic material from landfills. Some yard waste drop-off facilities also offer residents opportunities to obtain mulch or compost at low cost. And after the holiday season, many sites also accept old holiday trees. Search **RecycleSpot** to find a center near you.
- **Pickup:** A number of communities offer curbside yard waste collection in addition to regular trash and recycling services. Search by **community** in RecycleSpot to see if your city is one of them (and call to verify). If you don't have municipal leaf and brush curbside collection, there are private companies that also manage lawn refuse. **RecycleSpot** includes a list of many providers; contact them to find out about the costs and procedures.

Collection Facilities: Bringing your lawn and garden refuse to a community collection center is another way to divert useful organic material from landfills. Some yard waste drop-off facilities also offer residents opportunities to obtain mulch or compost at low cost. And after the holiday season, many sites also accept old holiday trees. Search **RecycleSpot** to find a center near you.

Curbside Pick-Up: A number of communities offer curbside yard waste collection in addition to regular trash and recycling services. **Search by community in RecycleSpot** to see if your city is one of them (and call to verify). If you don't have municipal leaf and brush curbside collection, there are private companies that also manage lawn refuse. RecycleSpot includes a list of many providers; contact them to find out about the costs and procedures.

City of Leavenworth, Kansas			
2021 Stormwater-Related Policy Reports & City Commission Minutes (which can be found at this link: www.leavenworthks.org/publicworks/page/engineering)			
No.	**Date**	**Type**	**Subject**
	2/9/2021	Policy Report	Review DRAFT 2020 KDHE Annual Stormwater Report
		Commission Minutes	
		Policy Report	Consider Engineering Contract w/Wilson & Co. for Stormwater Improvements at 741 Pottawatomie
		Commission Minutes	
		Policy Report	Consider Stormwater Cost Share Agreement with USD 453
		Commission Minutes	
	2/23/2021	Policy Report	Review Final 2020 Draft KDHE Annual Stormwater Report and Adopt Resolution B-2277
		Commission Minutes	
	4/13/2021	Policy Report	Consider Bids for 16th Terrace Stormwater, Phases 2 & 3
		Commission Minutes	
	4/27/2021	Policy Report	Consider Change Order No.4 for 16th Terrace & Thornton Design Contract, Phases 2 & 3
		Commission Minutes	

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report - Section E) (BMP Number 3)

BMP 3 - Illicit Discharge Detection and Elimination (IDDE)

- Employee Training - link is: https://www.leavenworthks.org/publicworks/page/2021-kdhe-annual-stormwater-report-supporting-documents
- Grease Trap Prevention Program Summary
- Municipal Service Center Household Hazardous Waste Cleanup Data

2021 City of Leavenworth Employee Stormwater Training & Meetings			
No.	**Training**	**Employee Name(s)**	**Date Completed**
City Hall			
1	Extend the Life of Paved & Unpaved Roadways with Geocells	Justin Stewart	February
2	Joints and Jointing of Storm Sewers and Culverts		March
3	Soils as a Building Material for Buried Infrastructure		
4	Detention Basin Owners	Mike McDonald, Mike Stephan, Barry Smith	
5	Omega Pipe Lining (UV)	Brian Faust, Mike Stephan, Justin Stewart, Jon Lemke, Patrick Fuimaono, Tim Guardado, Manual Carrera	April
6	Modern Designing of Stormwater Channels using the GEOWEB System	Justin Stewart	May
7	Resilience and Sustainability of Drainage Infrastructure		June
8	Managing Stormwater through Green Infrastructure & Low Impact Development		
9	Instaturf Training Presentation	Barry Smith, Justin Stewart, Mitch Braget, Jackie Porter, Wayne Files, Michael Richardson	
10	TCPA Webinar: Concrete Pipe Ingredients	Justin Stewart	July
11	ACPA: Pre & Post Installation and Inspection		August
12	The Fundamentals of High-Rate Biofiltration		
13	Muscle Wall ASP	Mike Stephan, Justin Stewart, Becky Beaver, Derek Burleson, Jon Lemke, Hal Burdette, Tim Guardado, Brian Faust	
14	Designing Naturally Vegetated & Hard-Armored Retaining Walls	Justin Stewart	October
15	Box Culvert Design		
16	Retaining Wall Solutions		
17	Reddi Rock Stormwater Wall	Mike Stephan, Justin Stewart, Shane Milburn, Becky Beaver, Derek Burleson, Mitch Braget	
18	Elevation Certificates: Section A	Justin Stewart	November
19	Elevation Certificates: Section B		
20	Elevation Certificates: Sections C, D, E		

City of Leavenworth
Grease Prevention Program
2021 Summary

February 14, 2022

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 overflows 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 that 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 2020, there were 91 businesses identified in 2021 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 at their location.

Staff performed 14 documented inspections on grease traps in 2021.

There were 7 new grease traps/interceptors that were installed in 2021.

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 2022. 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.

Leavenworth City Household Hazardous Waste Clean-up

Saturday June 5, 2021

Household Hazardous Waste Participation by materials

Latex Paint – 2520 lbs.

Oil Base paint – 32 lbs.

Flammable Liquids – 400 lbs.

Poisons – 48 lbs.

Corrosives – 64 lbs.

Aerosols – 26 lbs.

Antifreeze – 80 lbs.

Car battery – 0 lbs.

Total Weight – 3144 lbs.

Customers serviced

38

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report - Section E) (BMP Number 4)

BMP 4 - Construction Site Stormwater Runoff Control

Examples of:

- Erosion and Sediment Control Inspection Report Forms
- Inspection of Runoff Control
- Detention Basin Inspection Form
- Letter Referencing Erosion Control
- Land Disturbance Permit (LDP) Applications
  - Sample of LDP Application can be found at:
  - Sample of Erosion and Sediment Control Inspection Report Form
  - Stop Work Order for Failure to Install and Maintain Erosion Control Measures

Full Documentation can be found at:

https://www.leavenworthks.org/publicworks/page/land-disturbance-permit-ldp-documents

Erosion and Sediment Control Inspection Report Form

Project Name and Location 4825 SHARP RD - LDP APP 8944

Weather: 50° Cloudy

Rain in last 24 hrs (inches): 0"

Owner / Permittee: Denny

A. Current Construction / Active Areas:

NSFR

Pollution Control Measures (BMP) Checklist:

- A Inlet Barrier (i.e.: gravel bags)
- NA Sediment Barriers (i.e.: ditch checks)
- NA Erosion Blankets, Hydromulch / Seed, etc
- A Stabilized Construction Entrance
- NA Stream Crossings
- Seed / Sod Areas
- A Sediment Basins & Discharge Locations
- Borrow Areas
- A General Site Condition (trash, etc)

*B. Problem Areas / Special Observations(*Note problem areas ONLY below*):*

BMP	Location	Observations, Effectiveness, & Corrective Actions Ordered

C. Listing of Areas where construction operations have permanently or temporarily stopped; stabilization measures initiated.

D. Have items noted on last inspection been corrected? Yes No (if No, Explain:)

CONCRETE DRIVEWAY FINAL GRADE COMPLETE

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.

12/15/21
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

November 8, 2021

Reilly Homes LLC
P O BOX 9
Leavenworth, KS 66048

STOP WORK ORDER

Mr. Reilly,

Despite communications with you on multiple occasions, erosion control measures within the West Glen Phase II Subdivision, are only partially installed.

In accordance with City of Leavenworth Ordinance No. 8021 Section 18-95 "Land Disturbance Permits: Enforcement of Code Provisions", a Stop Work Order is being issued for failure to install and maintain the required erosion control measures. As of November 8, 2021 at 5pm, you are hereby ordered to STOP ALL WORK.

In order to have the STOP WORK ORDER lifted, all erosion control measures must be properly installed and approved by the City Engineer. You will also be required to provide a detailed erosion control plan, maintain the required erosion control measures and provide rain check sheets to avoid further STOP WORK ORDERS or fees.

Plans should be submitted to the Building Inspection Department located on the second floor of City Hall, 100 N. 5Th Street between the hours of 8:00 a.m. and 5:00p.m. Monday thru Friday.

Please feel free to contact Project Manager Mike Stephan (913-684-0375) with any questions you may have.

Attachment: Ordinance 8021, Section 18-95

Heather Gabbert

From: Brian Faust
Sent: Tuesday, November 9, 2021 3:51 PM
To: Mike Reilly; colby@reillyhomesinc.com
Cc: Michael Stephan; Hal Burdette; Heather Gabbert
Subject: Stop work order

We are removing the stop work notices that were placed yesterday in West Glen 2. Please continue installing the remaining measures and make sure to maintain until all construction is complete and grass reestablished.

Brian D. Faust, PE
Public Works Director
City of Leavenworth
100 N. 5th Street
Leavenworth, KS 66048

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report - Section E) (BMP Number 5)

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

Detention Basin Documents for Annual Meeting

a. Sample Letter
b. Public Meeting Agenda
c. Sign-In Sheet
d. Contamination Action Plan
e. Sample Checklist for Contamination Spills
f. Basin Information Pamphlets
g. Detention Basin Inspection Sample Form
h. Stormwater Treatment Facilities Overview
i. SWPPP Inspection Sample
j. BMP Stormwater Facilities within City Limits

February 4, 2021

Armed Forces Insurance
550 Eisenhower Rd
Leavenworth, KS 66048

Subject: **Water Quality Installation/Detention Basin/BMP Annual Meeting Wednesday, February 24th 2021**

Dear Property Owner/s,

Our records indicate that you own or are responsible for operating and/or maintaining a water quality installation within the city of Leavenworth. This may be a detention basin, infiltration basin, grass strip, or other water quality installation within the City of Leavenworth.

The City of Leavenworth has hosted a public information meeting annually regarding the function and maintenance of detention basins and other "Best Management Practice" (BMP) installations within the City. This year the City is again requesting that you attend this very important meeting on **Wednesday, February 24th 2021, 4:00 p.m. to 6:00 p.m. at the City Hall Commission Room.**

This is planned to be an "in-person" meeting. According to City regulations related to COVID:

- Masks are required
- Seating is limited to a maximum of 17 people (including staff) in the commission room.
- Additional people attending will need to meet with staff in the light court (limited to 10 people total)

You can also contact staff by phone or email if not able to attend the meeting.

There is no set agenda or scheduled presentation. City staff is prepared to discuss these topics and others of concern to you:

1. City Commission has approved staff to develop regulations based on the attached draft regulations. These are currently planned to be effective July 1, 2021.
2. Fees and fines related to having an installation and for noncompliance of policies are included in #1 above.
3. Operation and maintenance procedures of the BMPs in general and your installation in particular.
4. Expectations regarding (proposed) Annual certification of detention basins and selected other BMP installations.

The City is also requesting that you:

The City is also requesting that you:

1. Verify that ownership contact information is correct.
2. Please submit records of maintenance activities for your BMPs from 2020 by email, regular mail, or bring to the meeting.
    a. (bsmith@firstcity.org)
    b. Barry Smith, City Hall 100 N. 5th Street, Leavenworth, KS 66048

Sincerely,

Michael G. McDonald, P.E.,
Director of Public Works

Cc: Paul Kramer, City Manager

Attachment:
Proposed Changes to City Code Section for "Stormwater Management"

DETENTION BASIN OWNER'S INSPECTIONS AND MAINTENANCE PUBLIC MEETING AGENDA

February 24, 2021
4:00 to 6:00 pm

CITY OF LEAVENWORTH CONTACTS:

- Michael McDonald, Director of Public Works
  1-913-684-0375, (mmcdonald@firstcity.org)
- Justin Stewart, Sr. Engineering Technician – Public Works Engineering
  1-913-684-0373 (jstewart@firstcity.org)
- Mike Stephan, Project Manager – Public Works Engineering
  1-913-684-0375, (mstephan@firstcity.org)
- Barry Smith, Engineering Technician – Public Works Engineering
  1-913-684-0375, (bsmith@firstcity.org)

TYPES OF BASINS:

- Detention Basin/Pond (Dry Pond)
  - Designed to hold back or detain storm water for a short period of time.
  - Helps prevent/reduce flooding.
- Retention Basin/Pond (Wet Pond)
  - Designed to continually hold or retain storm water for extended period of time.
  - This type will be "wet" all of the time.

OTHER TYPES OF BMP'S:

- Pervious Pavement
  - Porous concrete pavement that allows run-off water to leave a site quickly.
  - Designed to detain storm water in a clean gravel pit.
  - This is constructed under the pavement.
- Bio-Swales
  - Designed to detain storm water for a short time.
  - Uses a grate, which will take high flows.
  - Low flows will soak through special soil mix and into storm drain.
- Underground Detention Systems
  - Designed to detain storm water underground.
  - Allows site footprint to be used as parking lot or other similar uses.
  - Low flows will soak through gravel drainage bed and into the ground.
  - High flows will drain into the storm sewer when gravel drainage bed is full.

TOPICS OF CONCERN REGARDING INSPECTION & MAINTENANCE:

- Weed Control
- Brush Control
- Erosion Control
- Plan of Action for Contaminated Spills
- Inspections Completed and Reported
- Remove trash from the basin
- Inlet & Outlet Maintenance (Keeping Clear of Growth and Debris)
- Annual maintenance certification Maintenance Schedule Required.
- Maintenance records must be kept for 5 years.
- Annual maintenance report due by December 31.
- Failure to submit records can result in a fine.
- 3-year certification – by a licensed engineer certifying the facility has full storage capacity, all inlet/outlet structures are fully functional, and the facility is functional in accordance with the approved plans and specifications.
- Failure to comply.
- City can initiate repairs and assess all costs to the owner.
- City can file a complaint in court and assess fines.
- $100.00 per month for failing to submit maintenance log
- $500.00 per month for failing to submit 3-year certification
- $250.00 per day for failing to abate any nuisance or hazard

2021 DETENTION BASIN INFORMATION MEETING

Project:	Detention Basin Owners Meeting	**Meeting Date:**	3/14/19 4:00pm
Facilitator:	City of Leavenworth	**Place/Room:**	Commission Room

Name	Organization	Phone	E-Mail
Mike McDonald	Public Works Director		MMCDONALD@FIRSTCITY.ORG
Mike Stephan	Project Manager		MSTEPHAN@FIRSTCITY.ORG
Barry Smith	Engineer Technician		BSMITH@FIRSTCITY.ORG
Greg Stewart	Home 2 Hilton		
Joshua Smith	COSE Civic		
DAVID WOLK	Armed Forces Insurance	913-727-4482	david.wolk@afi.org
JEFF DEDELLE	Prop owner	913-683-3592	
JONATHAN KIRBY	U. of Saint Mary	913-683-2813	kirby85@stmary.edu
Scott Foutch	Foutch Brothers	816 820-9183	Scott@foutchbrothers.com
Mike Reilly	Reilly Homes	913-683-0233	Mike@reillyhomes.com

CONTAMINATION ACTION PLAN!

The City of Leavenworth is required to evaluate the effectiveness of facilities constructed to address stormwater runoff within the city. Maintenance and operation of ponds and detention basins are regulated by the Environmental Protection Agency (EPA), Kansas Department of Health and Environment (KDHE), and the City of Leavenworth, Kansas. Inspection and maintenance of the facility is typically provided by the property owner and/or a home owner's association.

Owners of ponds are expected to be prepared to react in the event of a chemical spill or other contamination that impacts the water in their pond. The City of Leavenworth is requesting that you submit inspection reports and an action plan showing how you will report, contain, and protect the City stormwater system in case your detention basin is contaminated by chemical spills, sanitary sewer overflows, or other forms of contamination.

If contamination occurs within the detention basin, action needs to be taken to mitigate pollution to the water and soil within the City stormwater system. The KDHE website list actions to be taken at: www.kdheks.gov/spill/download/KS_Spill_Reporting.pdf . Below is a list of recommended immediate actions to be taken and phone numbers of authorities to be contacted.

- ✓ Containing the spillage by means of the safest practical way possible by blocking the outflow of the structure or downstream.

- ✓ If the release is not contained or threatens the health or safety of the local population **dial 911**.

- ✓ Contact the City **Water Pollution Control** 24/7: **913-682-1090**.

- ✓ If a spill exceeds the reportable quantities of federally-listed hazardous materials,
  - ➢ **dial 911**
  - ➢ **Contact Leavenworth County Emergency Management:**
    - i. **913-684-0455 or**
    - ii. **Sheriff Office 913-682-1313**
  - ➢ Work with the authorities to contain contaminants.
  - ➢ **The Kansas Commission on Emergency Planning & Response (CEPR) – 785-274-1394 –** requires verbal notification and a follow-up written report within seven days after the verbal report.

- ✓ Whenever a spill exceeds the reportable quantities of federally-listed hazardous materials, it must also be reported to the National Response Center (NRC). Federal law also requires any oil spill that has impacted or threatens a waterway must be reported to the NRC. EPA Region 7 Emergency Response Branch personnel monitor the NRC reports and may call the spiller back for more information. **NRC's 24-hour number is: 800-424-8802**.

- ✓ Immediately make verbal notification to the Kansas Department of Health and Environment. The **Kansas Spill Reporting Number is: (24/7) 785-291-3333**.

SAMPLE CHECKLIST FOR CONTAMINATION SPILLS

It's a good idea to have the basic checklist, a map of the stormwater system, and a list of responsible party contact information conveniently available in the case of an emergency. Below is a basic checklist for use as an example.

- ✓ Contact the authorities and identify basic information on the spill:
  - ➢ Quantity and location of the spill.
  - ➢ Type of contaminants.
  - ➢ Time of spill.
  - ➢ Whether injuries have occurred.
  - ➢ Status of containment efforts.

- ✓ Implement the immediate action plan:
  - ➢ Obtain medical assistance if there has been an injury.
  - ➢ Prevent sources of ignition for flammable materials.
  - ➢ Contain the spill.

- ✓ Notification of governmental authorities and others may be required:
  - ➢ Identify applicable reporting requirements from laws, rules, and permits.
  - ➢ Make notification as required by law, and notify neighbors if appropriate.

- ✓ Respond and clean up as required by law:
  - ➢ Call an outside contractor?
  - ➢ Manage waste materials in accordance with the law.

- ✓ Document events, notifications, and response actions through photographs, written summaries, copies of documents, etc.

- ✓ Make written follow-up reports to government agencies and others as required by law.

- ✓ Review spill to determine root cause and opportunities for prevention of similar spills.

BASINS
INTRODUCTION

Your detention basin is a storm water best management practice (BMP) designed to temporarily capture and hold storm water runoff during periods of heavy rain, and slowly release this flow over a period of one or two days so it minimizes flooding and streambank erosion problems downstream. They also help remove sediments from storm water runoff, which helps improve the quality of local streams. Like most other things, a detention basin may not function properly or it may fail prematurely if not properly maintained. Once a detention basin fails, it is often very expensive to correct.

Many detention basins are located on private property, including parcels of land owned and maintained by a homeowners association (HOA). Local governments do not have the authority to maintain detention basins on private property. Rather, these are the responsibility of the lot owner to maintain.

Whether you are an individual property owner, a homeowner's association representative, or a residential/commercial property manager, this Guidebook will help answer questions and provide you with instructions for basin maintenance activities. Routine maintenance will prolong the life of your detention basin, improve its appearance, help prevent flooding and property damage, and enhance local streams and lakes.

WHAT ARE DETENTION BASINS AND WHY ARE THEY IMPORTANT?

When land is altered to build homes and other developments, the natural system of trees and plants over relatively spongy soil is replaced with harder surfaces like sidewalks, streets, decks, roofs, driveways and even lawns over compacted soils. As a result, less rain water soaks into the ground and more rain water, also known as storm water, flows off the land at a faster rate. This can lead to streambank erosion and possibly cause downstream flooding.

A detention basin is a man-made depression that collects and temporarily holds storm water runoff. Your detention basin (along with others in the area) helps to slow the rate of storm water runoff from the neighborhood and improve the quality of the storm water leaving the detention basin. Your detention basin is important because:

- it collects and detains storm water
- it helps settle out and hold sediment
- it protects local creeks and private property
- it reduces downstream flooding

There are different types of storm water management basins. Some basins are dry and have mowed turf grass in the bottom of them. These are referred to as dry detention basins, or simply detention basins. Others are designed to have a permanent pool of water and are commonly called wet ponds or retention basins. These wet ponds hold water throughout the year, but also have extra storage space that fills with water after a storm.

DRY BASIN

WET BASIN

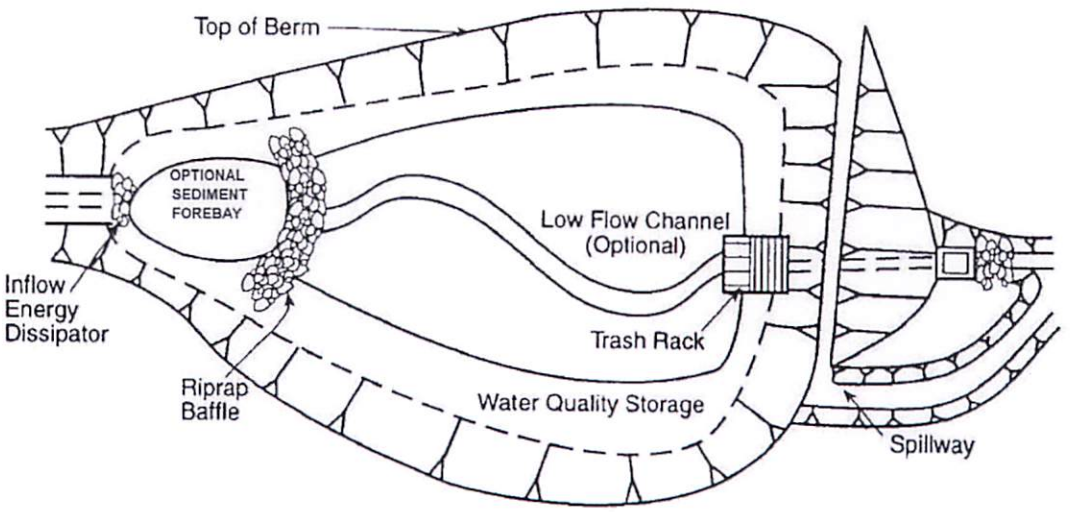
BASIN
COMPONENTS

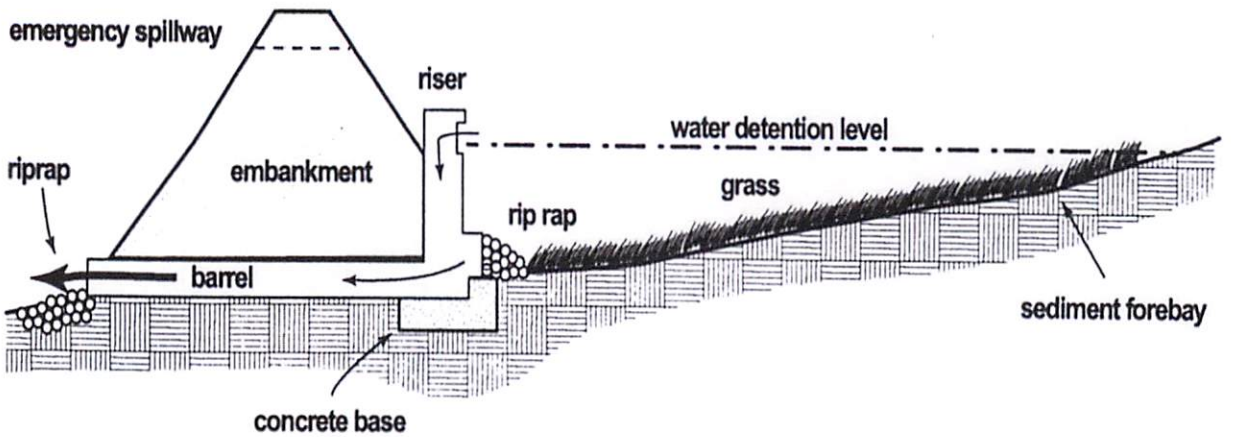
Basin Outlet Structure

A detention basin contains different components, including inlet pipes (there may be one or multiple inlets), the side slopes and bottom, a low flow channel, the outlet structure, the outlet pipe, an embankment and emergency spillway, and rip rap that is usually placed around pipes where they enter and exit to prevent erosion.

Outlet structures vary from basin to basin, but all will include a minimum of two outlets - a small diameter outlet and a larger diameter overflow. Outlets may be covered by a trash rack or metal grate.

Newer, more advanced detention basins may include a *forebay*, which is a settling pool located at the inlet to a basin, and is separated from the rest of the basin by a level dike. The purpose of the forebay is to collect sediment before it enters the main basin. By concentrating sediment in the forebay, it becomes much easier (and less expensive) to clean the sediment out. Some detention basins may also include a *micropool*, which is a small, shallow, permanent pool of water near the outlet designed to prevent re-suspension of sediment and clogging of the outlet.





BASIN MAINTENANCE

Pervious concrete pavement is a portland cement-based, rigid permeable pavement that serves not only as the surface layer of a stormwater management system, but also as a vital part of a water filtration system.

A consistent maintenance program is the best way to ensure that a detention basin will continue to perform its water quality functions. In general, a maintenance program should contain the following components:

- Maintain access for inspection and maintenance
- Regular inspections
- Debris and litter control
- Vegetation management
- Embankment and outlet stabilization
- Sediment removal

A Hydro Excavator Modified to Vacuume Sediment From Pervious Pavement

MAINTAINING YOUR DETENTION BASIN

The first step in a maintenance program is to obtain a copy of the detention basin design. Review the engineering design!

Basin Access

Insure that you have proper access to the basin for regular inspection and maintenance activities. Access should be wide enough for heavy equipment that may be needed for dredging or major repairs. Consider HOA prohibition against homeowners placing fences, outbuildings, landscaping or anything which might interfere with proper access.

Record Keeping

It is important to keep records of all inspections, maintenance activities, repairs and associated costs.

Management Costs

An effective detention basin management program does come with costs, and detention basin owners should plan accordingly. The Center for Watershed Protection has estimated that the annual cost of routine maintenance is typically about 3 to 5% of the construction cost. With good record keeping, the owner can determine annual costs more accurately. Owners should set aside money for routine maintenance as well as the occasions when outside expertise or equipment is needed to maintain, upgrade or repair a basin.

Eagles Hall Dry

Eagles Hall Detention Basin After a High Rate of Rain

A Controlled Burn May Be Necessary If The Basin Can't Be Accessed With Mowers

VEGETATION MANAGEMENT

Vegetation should be maintained throughout the basin to prevent erosion, including the basin bottom, side slopes, and both sides of the dam. Turf grass is the most common groundcover, although other vegetation, such as deep-rooted native plants, can be used to improve basin performance by allowing more water to infiltrate (to soak into the soil). If something other than turf grass is used in the basin bottom, care should be taken to use plants that can withstand temporary inundation and wet soils as well as periods of extended dryness.

If vegetation in a basin is not managed, problems can result. To stay ahead of problems:

- In the spring and fall, inspect the vegetation along the side slopes and basin bottom.
- Re-seed any barren or eroded areas which have developed.
- Any small erosion gullies which have appeared should be completely filled with well-compacted soil, re-seeded, and monitored for recurrence.
- In the spring, remove decomposing vegetation if it is clogging pipe openings.
- Mow at least twice a year if turf grass is used as the groundcover in the basin to prevent trees and woody plants from becoming established. The basin may be mowed more frequently for aesthetic purposes. It is recommended that a grass height of 2 inches be maintained.

No trees or shrubs should be planted or allowed to grow within 15 feet of inlet or outlet pipes or manmade drainage structures such as spillways or earthen embankments. Plants with roots that seek water, such as willow or poplar, should not be used within 50 feet of pipes or manmade structures.

Once a year, the detention basin should be inspected for the appearance of invasive species, including honeysuckle, Callery pear, autumn olive, buckthorn (common & glossy), purple loosestrife and phragmites. Vines can also be a nuisance around the inlet and outlet structures.

https://www.kansasforests.org/forest_health/invasivespecies.html

There are good and bad points about the common cattail. On the plus side, the common cattail (*Typha latifolia*) is a native species and is effective in removing excess nutrients from storm water runoff. On the down side, cattails have a tendency to invade and grow quickly, crowding out other desirable species. Many people also feel they are aesthetically unpleasing. If you choose to allow cattails to grow in the basin, there are some important things to keep in mind. Cattails should be kept clear of the outlet structure, as they can cause blockages. Cattails should also be kept away from the dam area. Cattails can encourage muskrats, and their burrows can affect the integrity of the dam. If you wish to eliminate the cattails in the future, it is important to note that cattails can be very difficult to remove, and special equipment may be needed.

CITY ORDINANCES AND CODE ENFORCEMENT

ARTICLE V. - CUTTING OF WEEDS AND VEGETATION

Sec. 28-122. - Weeds to be removed.

It shall be unlawful for any owner, agent, lessee, tenant, or other person occupying or having charge or control of any premises to permit weeds to remain upon said premises or any area between the property lines of said premises and the centerline of any adjacent street or alley, including, but not specifically limited to, sidewalks, streets, alleys, easements, rights-of-way and all other areas, public or private. All weeds as hereinafter defined are hereby declared a nuisance and are subject to abatement as hereinafter provided. More information concerning the code of ordinances is available at the city website.

https://library.municode.com/ks/leavenworth

REGULAR INSPECTIONS/MAINTENANCE:

THE KEY TO KEEPING A WELL MAINTAINED BASIN

The following maintenance and inspection tasks should be conducted for basin structures. Please also refer to the inspection schedule at the back of this Guidebook.

Outlet structure blocked with sediment and debris

Monthly and after major storms:

- *Inspect for sediment, trash or other debris that may be blocking the inlet or outlet pipes, as well as the spillway.* Debris and sediment commonly clog detention basins and reduce the basin's overall effectiveness. Additionally, improperly maintained basins can harbor breeding areas for mosquitoes. Any sediment or debris found to be blocking the inlets or outlet structure, even partially, should be removed. Remove accumulated sediment with a shovel and wheelbarrow if it is blocking water flow. Small amounts of removed sediment can be spread evenly on upland areas and seeded. All trash and debris throughout the basin should also be removed.

Early spring, fall and after major storms:

- *Inspect the entire basin for debris in early spring, fall, and after major storms.* If necessary, clear large limbs and other debris that may ultimately block the outlet structure. Dead vegetation should be raked out in early spring. If the spillway structure is frequently found to be clogged or partially clogged, debris within the basin area should be cleared on a more frequent basis.
- *Check for standing pools of water*, especially in the low flow channel. Eliminate these as they are found, either by filling in low spots and seeding, or by re-grading the problem area.

Twice a year and after major storms:

- Inspect riprap at the inlet and outlet pipes. Check for erosion around the pipe. Replace riprap when missing or clogged with sediment and debris.

Annually:

- Inspect the inlet pipes and outlet pipe for structural integrity - check inlet/outlet pipes to ensure they aren't crumbling or broken. Do not enter any pipes to complete inspection (such as the outlet pipe under the embankment). Many local contractors have camera equipment that can be used to inspect these pipes.
- Inspect for excess sediment accumulation in the basin - Remove every 5-10 years or when 6-12 inches of sediment has accumulated.
- Inspect any safety-related structures, including fences and gates, for problems or defects. Correct as necessary.

SEDIMENT REMOVAL

Excess silt and sediment can collect over time and reduce the storage capacity of the detention basin. In addition, sediment tends to collect around the outlet structure and may block the outlet. To prevent too much sediment from building up:

- Inspect the basin for sediment accumulation annually
- Remove excess sediment when six inches of sediment has accumulated in the basin, or approximately every 5-10 years.
- If the basin has a forebay, remove sediment when the forebay capacity has been decreased by 50%.

Sediment removal is fairly simple if access is available for the equipment. Front-end loaders or backhoes can be used to remove the accumulated sediment. Sediment removal should be done under the dry weather/dry soil conditions, otherwise, de-watering of the sediments might be necessary. Waste sediments are typically treated as uncontaminated soils and can be used as fill material; however, if soil is contaminated and deemed to be hazardous, it must be disposed of in a hazardous waste landfill.

MANAGING FOR MOSQUITOES

Mosquito problems may occur in detention basins that are not functioning properly and are not maintained. The best control technique is to ensure that stagnant pools of water do not develop. There are a variety of other things you can do to reduce the number of mosquitoes in your environment:

- Install bird houses or bat boxes near the basin.
- Cattails and bulrushes attract dragonflies and other mosquito-eating insects.
- Dense shrubs and brush often provide a habitat for birds and mosquito-eating insects.

BASIN MANAGEMENT

WHAT CAN THE HOMEOWNER DO?

INDIVIDUAL PROPERTY MANAGEMENT WITHIN THE DRAINAGE AREA

There are many steps that property owners can take to ensure that the detention basin functions properly and to minimize long- term maintenance. A number of these activities are described below:

- Do not place yard waste such as leaves, grass clippings or brush in the detention pond, drainage ways, or in the storm drains located in the streets. Yard waste can block basin inlet and outlet pipes. This material also releases excess nutrients as it decomposes. Nutrients, such as nitrogen and phosphorus, are among the most significant pollutants of concern in local lakes and streams.
- Do not dump any materials, such as motor oil, into the storm sewer system. Improperly disposed of materials will pollute the basin. It is also illegal.
- Do not use unapproved or unnecessary amounts of pesticides, herbicides, or fertilizers. These products will wash from the basin into local streams and rivers. In addition, these chemicals can be harmful to the wildlife, such as bees, frogs, toads, fish, and dragonflies.
- If you use fertilizers, test your soil first to find out what nutrients are lacking, and apply only what is needed. Use low-phosphorus, slow-release varieties. Keep fertilizers on the lawn and not on paved areas. Fertilize after and not before a rain storm. Never fertilize when heavy rain is predicted
- Pick up and properly dispose of pet waste.
- Mow high, and avoid mowing directly to the edge of lakes and streams. Sweep grass clippings from sidewalks and curbs and either compost or bag. Do not hose off clippings from driveways and sidewalks into the storm sewer system. Grass clippings can get into the water and add excess nutrients as they break down.
- Educate your neighbors. Share information and management tips with them. If your community has a web site or social media page, post helpful tips on these.

SAMPLE INSPECTION SCHEDULE

Activity	Frequency
Inspect inlet/outlet pipes and spillway for debris, sediment accumulation or other blockages	Monthly and after major storms
Inspect side slopes for barren or eroded areas	Early spring and fall
Inspect/clear pond of debris, tree limbs, dead vegetation, etc.	Early spring, fall, and after major storms
Rip rap inspection, replace as needed	Early spring, fall, and after major storms
Check for standing pools of water, eliminate when found	Early spring, fall, and after major storms
Mowing	At least twice annually
Inspect inlet/outlet pipes for structural integrity	Annually*
Inspect safety-related structures (e.g., fences, gates) for defects	Annually
Inspect Integrity of Dam	Annually*
Inspect for invasive plant species	Annually
Inspect for sediment accumulation	Annually
Clean excess sediment from pond	When 6-12 inches has accumulated, roughly every 5-10 years.

** If indications of failure are observed, immediately seek advice from a professional engineer.*

Detention Basin Inspection

Basin Address and Location: _____

Owner Name and Address: _____

Inspection Date: _____

Inspected By: _____

	Y	N	N/A	Last Maintenance Date
Are inlet/outlet structures free of debris, trash, sediment, and leaves?	☐	☐	☐	_____
Repairs/Comments: _____				
Is rip rap in place and free of sediment?	☐	☐	☐	_____
Repairs/Comments: _____				
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: _____				
Is the trickle channel damaged by erosion?	☐	☐	☐	_____
Repairs/Comments: _____				
Is the out flow of water causing damage to adjacent property?	☐	☐	☐	_____
Repairs/Comments: _____				
Is there exposed soil with no vegetation growing?	☐	☐	☐	_____
Repairs/Comments: _____				
Is the facility draining properly according to as built plans?	☐	☐	☐	_____
Repairs/Comments: _____				

CITY OF LEAVENWORTH
2021 OVERVIEW OF STORMWATER TREATMENT FACILITIES

There are currently 68 stormwater treatment facilities. This includes bio-swales/inlets, dry/wet basins, underground basins, pervious pavement, and trash collectors. All the facilities appear to be functioning as designed. No new permanent BMPs were installed this year.

2021 SWPPP/LDP INSPECTIONS FOR CONSTRUCTION PROJECTS

- West Glen 2: 26
- West Glen 3: 12
- The Branches: 20

2021 DETENTION BASIN OWNER'S MEETING

- February 24, 2021
- 4:00 p.m. - 6:00 p.m.

2021 Detention Basin Public Meeting Summary

A total of 31 invitations were sent to property owners. Ten people were present for the meeting including City officials. The sign-in sheet is on file. Attendees showed up at different times between 4:00 pm. and 6:00 p.m. Attendees were given a packet with the agenda and a basic overview of detention basin maintenance. The packet also included examples of an emergency spill plan and an inspection form.

City Officials:

- Public Works Director Michael McDonald
- Project Manager Michael Stephan
- Engineering Technician Barry Smith

Fines, fees and the certification of detention basics were discussed. Owners/operators were told that these are only being discussed and not approved yet. They were told that likely the only thing to be approved this year would be a registration fee between $20 - $25.

The City requested the owners continue to submit inspection/maintenance records and to keep an emergency chemical spill plan in their files and with the City.

Dave Stoke from the Leavenworth School District did not attend, but submitted records via email.

Wendy Widener of Walmart responded via email and submitted records.

Jeffrey J. Duteau of the US Army Reserve responded via email and submitted records.

841 Meadow - Ray Umphrey claiming to represent The Thorn Trust at the Southwinds Subdivision, contacted the City by email claiming that the detention basin on their property is not a detention basin or is owned by the City. Records of correspondence concerning this are stored in the Southwinds file. Mr. Umphrey was mailed another letter through The Thorn Trust.

3030 Girard - Charles O. Thomas came into City Hall on February 23, 2021. The items discussed in the meeting were discussed with him.

The sign-in sheet and agenda are on file with the City.

As of January 19, 2022, no changes have been made to the City's code enforcement policy regarding Stormwater Treatment Facilities.

SWPPP INSPECTION

Project Information	
Name/Location	West Glen 3 2020-934
Contractor	Lexeco
Inspection Information	
Inspector	Barry
Inspection Date	8/23
Weather Information	
Rain Gauge: .60	
Current Weather at time of this inspection: Muddy after .5 of rain. Sunny	
Weather Forecast at time of this inspection: (when is next precipitation or wind event anticipated?) **No precipitation in Forecast**	

EROSION AND SEDIMENTATION BMP INSPECTION	**Installed & Operating correctly?**	**CORRECTIVE ACTION**
Are **Limits of Disturbance** clearly marked?	Y	
Are **natural resource areas** (e.g., streams, wetlands, trees, etc.) protected with barriers or similar BMPs?	Y	
Is **construction sequencing** being followed?	Y	
Are **structural BMPs** properly installed to control stormwater flow on the construction site?	Y	
Do **unstabilized areas** have appropriate controls in place?	Y	
Are all **slopes** protected from concentrated stormwater flow?	Y	
Are storm drain **inlets** properly protected?	N/A	Not installed yet

EROSION AND SEDIMENTATION BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are storm drain **outfalls** properly protected?	NA	
Are **perimeter controls** and sediment barriers adequately installed and maintained?	Y	
Are discharge points and **receiving waters** free of sediment deposits?	Y	**HEAVY RAIN ALLOWED SOME SEDIMENT TO BYPASS BMP'S**
Is **weather** forecast being checked regularly?	Y	

GOOD HOUSEKEEPING BMP INSPECTION	Installed & Operating correctly?	CORRECTIVE ACTION
Are BMPs effectively limiting **sediment** from being tracked into the street?	Y	
Is **trash/litter** from work areas collected and placed in covered containers regularly?	Y	
Are on-site **equipment**, vehicles, containers, and storage areas free from leaks?	Y	
Are **materials** that are potential stormwater contaminants stored inside or under cover?	Y	
Are **non-storm water discharges** free from contamination?	Y	
Are **washout facilities** (e.g. paint, concrete) available, clearly marked, and maintained and located at least 50-feet away from natural resources and storm drains?	NO	No wash out built yet
Are **vehicle and equipment** fueling, cleaning, and maintenance areas free from leaks and located at least 50-feet away from natural resources and storm drains?	Y	
Is **dust** being controlled on-site?	Y	
Is **sweeping** being used to keep sediment off roads and parking lots?	Y	
Are the SWPPP and ALL inspection **reports** being kept at the field?	Y	

City of Leavenworth 2021 Detention Basins					
Listing of BMP Stormwater Facilities City Wide as of December 31, 2021					
	Name	Location	Owner/Adress	Type	Notes
1	Core Civic	South of Facility	100 Highway Terrace	Dry Basin	
2	Townplace Suites	1001 N. 4th St.	300 Wyandotte KC, MO	Underground Basin	
3	Crown Estates 2	SE of Randolph Ct.	Jeff Dedeke	Dry Basin	Emailed Jeff for contact verification
4	Casey's 10th & Eisenhower	Casey's 10th & Eisenhower	Carol Bohannon	Dry Basin	
5	Zeck Ford	Behind Overflow Parking Lot	Zech Bros Development	Dry Basin	
6	Armed Forces Insurance	550 Esienhower Rd.	Armed Forces Insurance	Wet Basin	
7	Calvary Baptist Church	SE of Church Parking Lots	Calvary Baptist Church	Dry Basin	
8	Southwind Subdivision	841 Meadow	Charles O. Thomas	Dry Basin	
9	Animal Control	North of Parking Lot	City of Leavenworth	Rain Garden	Managed by Police Dept
10	Business & Technology Park	North Basin	City of Leavenworth	Dry Basin	
11	Business & Technology Park	South Basin	City of Leavenworth	Dry Basin	
12	Stubby Park	4th and Poplar	City of Leavenworth	Dry Basin	
13	16th Terr DB	End of Dead End Street	City of Leavenworth	Dry Basin	
14	Ottawa St.	North Side	City of Leavenworth	Bioswale	
15	Ottawa St.	South Side	City of Leavenworth	Bioswale	
16	Kiowa	South Side	City of Leavenworth	Bioswale	
17	Dakota	North Side	City of Leavenworth	Bioswale	
18	Dakota	South Side	City of Leavenworth	Bioswale	
19	Kickapoo	South Side	City of Leavenworth	Bioswale	
20	Miami	South Side	City of Leavenworth	Bioswale	
21	West City Hall Parking Lot N	North Side	City of Leavenworth	Bioswale	
22	West City Hall Parking Lot S	South Side	City of Leavenworth	Bioswale	
23	2nd & Cherokee City Parking Lot	East Side	City of Leavenworth	Bioswale	
24	3rd & Cherokee City Parking Lot	West Side	City of Leavenworth	Bioswale	
25	7th St. & Thornton	End of Dead End Street	City of Leavenworth	Bioswale	
26	CDS Trash Collector	667 Thornton	City of Leavenworth	CDS Trash Collector	New
27	CDS Trash Collector	Anthony School	City of Leavenworth	CDS Trash Collector	New
28	6th & Cherokee Parking Lot	West Center	City of Leavenworth	Bioswale	
29	7th & Cherokee Parking Lot	Center with Swale	City of Leavenworth	Detention Basin	
30	8th & Cherokee Parking Lot	East Side	City of Leavenworth	Bioswale	
31	Fraternal Order of Eagles	20th and Shawnee	City of Leavenworth	Dry Basin	
32	Dillon's NE Parkng Lot	NE Side	Dillons Food Stores	Underground Basin	
33	Dillon's SW Parking Lot	SW Side	Dillons Food Stores	Underground Basin	
34	Ben Day Lofts	1100 3rd Ave.	Exact Properties	Dry Basin	6757 N. National Dr. Parkville, MO
35	Fortgate Shopping Center	7th and Metropolitain	Fort Gate Properties	Underground Basin	Verified from GIS
36	Hampton Inn	SE Corner of Parking Lot	Hampton Inn	Dry Basin	Verified
37	Shenandoah Heights SD	Clayton Ct. & Gettysburg	HOA	Wet Basin	Emailed Brian Paxton 1/08/21
38	Shenandoah Heights SD	3700 Blk Clayton Ct.	HOA	Wet Basin	
39	Highland Pointe SD	SW Corner of Park Lane & Muncie	HOA	Dry Basin	Emailed Chris Pankow
40	Pine Meadow Place SD	4800 Block Parkway Drive	James Perry	Dry Basin	Verified
41	1028 Madison St.	1028 Madison St.	Joseph J. Marcec	Dry Basin	Patricia J. Douthitt, 1028 Madison
42	LVN Elementary	West Side of School Property	LVN Public Schools	Dry Basin	
43	Lawson Elementary	820 N. 5th St.	LVN Public Schools	Dry Basin	
44	Leavenworth High	2012 10th Avenue	LVN Public Schools	Dry Basin	
45	Nettie Hartnett	Nettie Hartnett School	LVN Public Schools	Dry Basin	
46	Anthony Elementary	570 Evergreen St.	LVN Public Schools	Dry Basin	
47	Anthony Elementary	Anthony Elementary	LVN Public Schools	Dry Basin	
48	David Brewer Elementary		LVN Public Schools	Dry Basin	
49	LVN Elementary	NE Corner of School Property	LVN Public Schools	Dry Basin	
50	Warren Middle School	East Side of School	LVN Public Schools	Dry Basin	
51	Leintz Funeral Home	4701 10th Avenue	Leintz Funeral	Dry Basin	Verified
52	Home 2 Suites	250 Delaware	Leavenworth Land LLC	Pervious Pavement	Emailed Kevin Chapman 01/08/21
53	Woods on Muncie	SE of Grand Ave/Wallis Lane	No HOA	Dry Basin	Nobody knows
54	Woods on Muncie	West of Ironwood Cul-de-sac	No HOA	Dry Basin	POB 181 Gardner, KS
55	Stove Factory Lofts	NE Corner of Property	Stove Factory Lofts	Underground Basin	603 East St, Parkville, MO
56	Home Depot	SW Corner of Property	The Home Depot	Dry Basin	Verified Tom Ebers
57	Cereal Ingredients	North Side	Tim Moore	Dry Basin	Add Steve Lacey to contact info
58	Cereal Ingredients	South	Tim Moore	Dry Basin	
59	The Branches SD	2100 Blk Birch St.	Triple R. Properties	Wet Basin	Verified
60	University of St. Mary	McDonald and Hughs Rd.	University of St. Mary	Dry Basin	
61	University of St. Mary	McDonald and Hughs Rd.	University of St. Mary	Dry Basin	Verified
62	University of St. Mary	McDonald and Hughs Rd.	University of St. Mary	Dry Basin	
63	University of St. Mary	McDonald and Hughs Rd.	University of St. Mary	Dry Basin	
64	University of St. Mary	McDonald and Hughs Rd.	University of St. Mary	Dry Basin	
65	US Army Reserve Center	20th St. & Metropolitan	US Army Reserve Center	Dry Basin	
66	Wal-Mart	5000 10th Ave.	Wal-Mart	Dry Basin	
67	Westside Family Church	Pond behind Church	Westside Family Church	Wet Basin	New contact: Michelle Wicker LV, KS

Appendix D (Continued)

Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report - Section E) (BMP Number 6)

BMP 6 - Municipal Pollution Prevention/Housekeeping

- Street Sweeping
- Salt Use

City of Leavenworth 2021
KDHE Annual Stormwater Report

Municipal Service Center
2021 Street Sweeping Data

Street Sweeping				
Year	3332	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.				
			Total Miles	
2020	2400	533	**2,933**	
2021	1396	723*	**2,119**	

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

City has total of 343 lane miles

City of Leavenworth

Municipal Service Center (MSC)

2021 Salt Usage Data

Annual Salt Usage		
Year	Tons	lb/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

Appendix D (Continued)

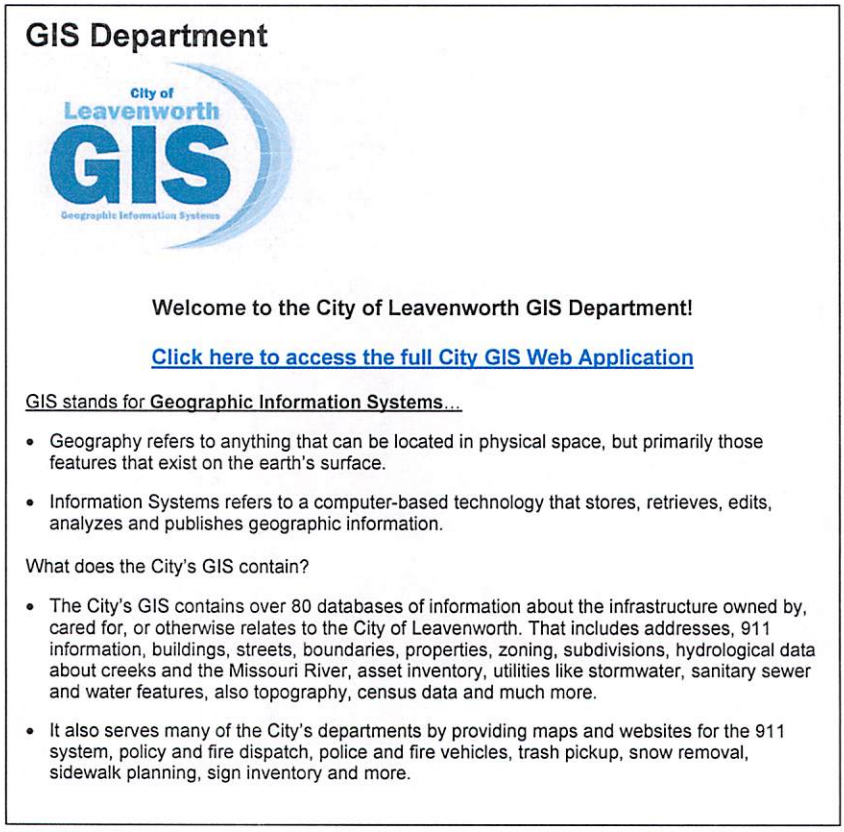
Selected Supporting Documentation for Stormwater Management Program (Stormwater Annual Report - Section E) (BMP Number 7)

Sample TMDL

N/A for City of Leavenworth

Appendix E
Map Showing Stormwater System and Outfalls

A DVD containing the current Map of the City showing creeks, streams, inlets, outlets, outfalls and other stormwater-related information in PDF format will be mailed with the annual report to Jordan Beck of KDHE on or before February 28, 2022.



GIS Department

City of Leavenworth GIS Geographic Information Systems

Welcome to the City of Leavenworth GIS Department!

Click here to access the full City GIS Web Application

GIS stands for **Geographic Information Systems**...

- Geography refers to anything that can be located in physical space, but primarily those features that exist on the earth's surface.
- Information Systems refers to a computer-based technology that stores, retrieves, edits, analyzes and publishes geographic information.

What does the City's GIS contain?

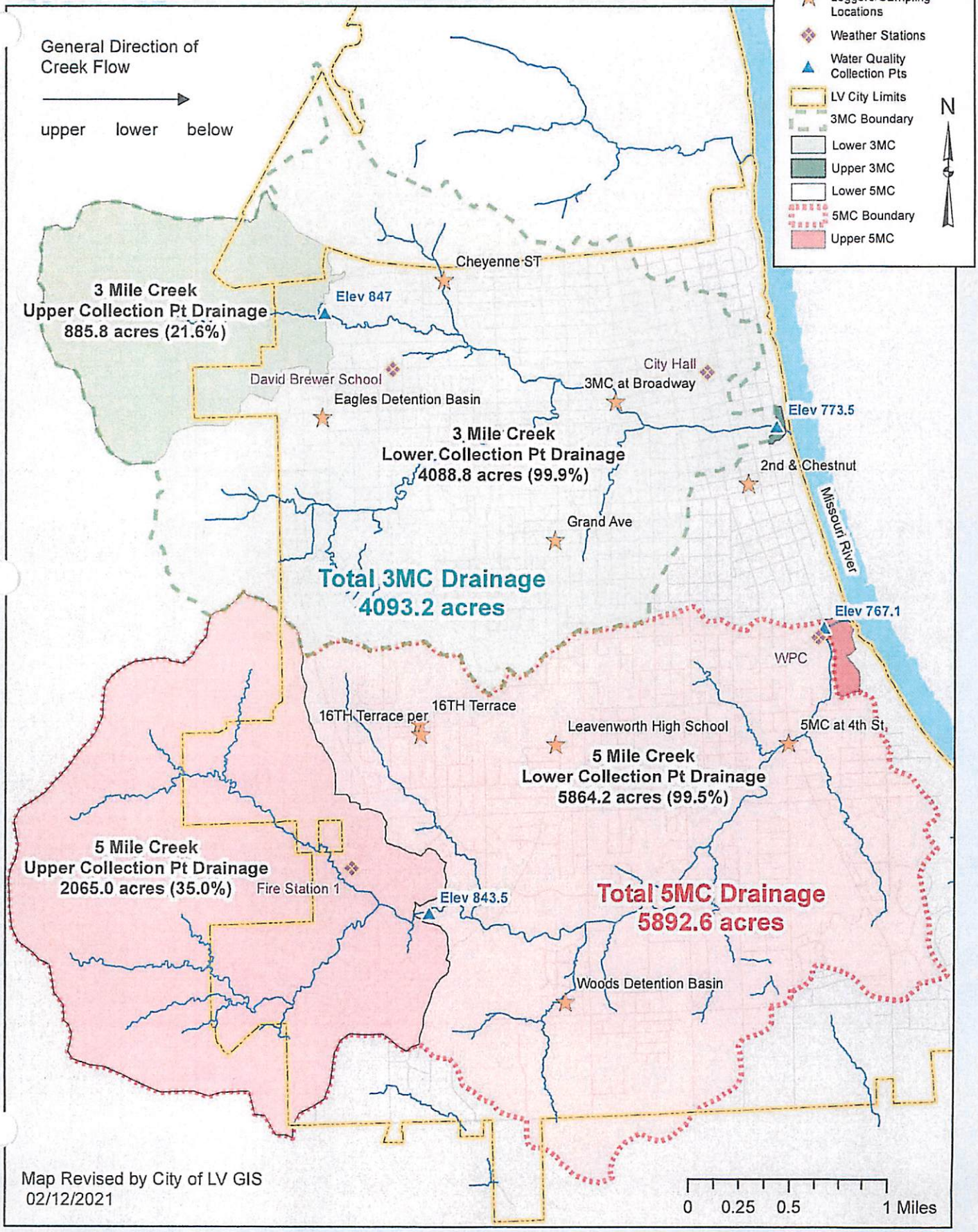
- The City's GIS contains over 80 databases of information about the infrastructure owned by, cared for, or otherwise relates to the City of Leavenworth. That includes addresses, 911 information, buildings, streets, boundaries, properties, zoning, subdivisions, hydrological data about creeks and the Missouri River, asset inventory, utilities like stormwater, sanitary sewer and water features, also topography, census data and much more.
- It also serves many of the City's departments by providing maps and websites for the 911 system, policy and fire dispatch, police and fire vehicles, trash pickup, snow removal, sidewalk planning, sign inventory and more.

The current City mapping can be viewed online by searching for and selecting "Click here to access the full City GIS Web Application" from the results, and following one of the links, or directly accessing the following address:

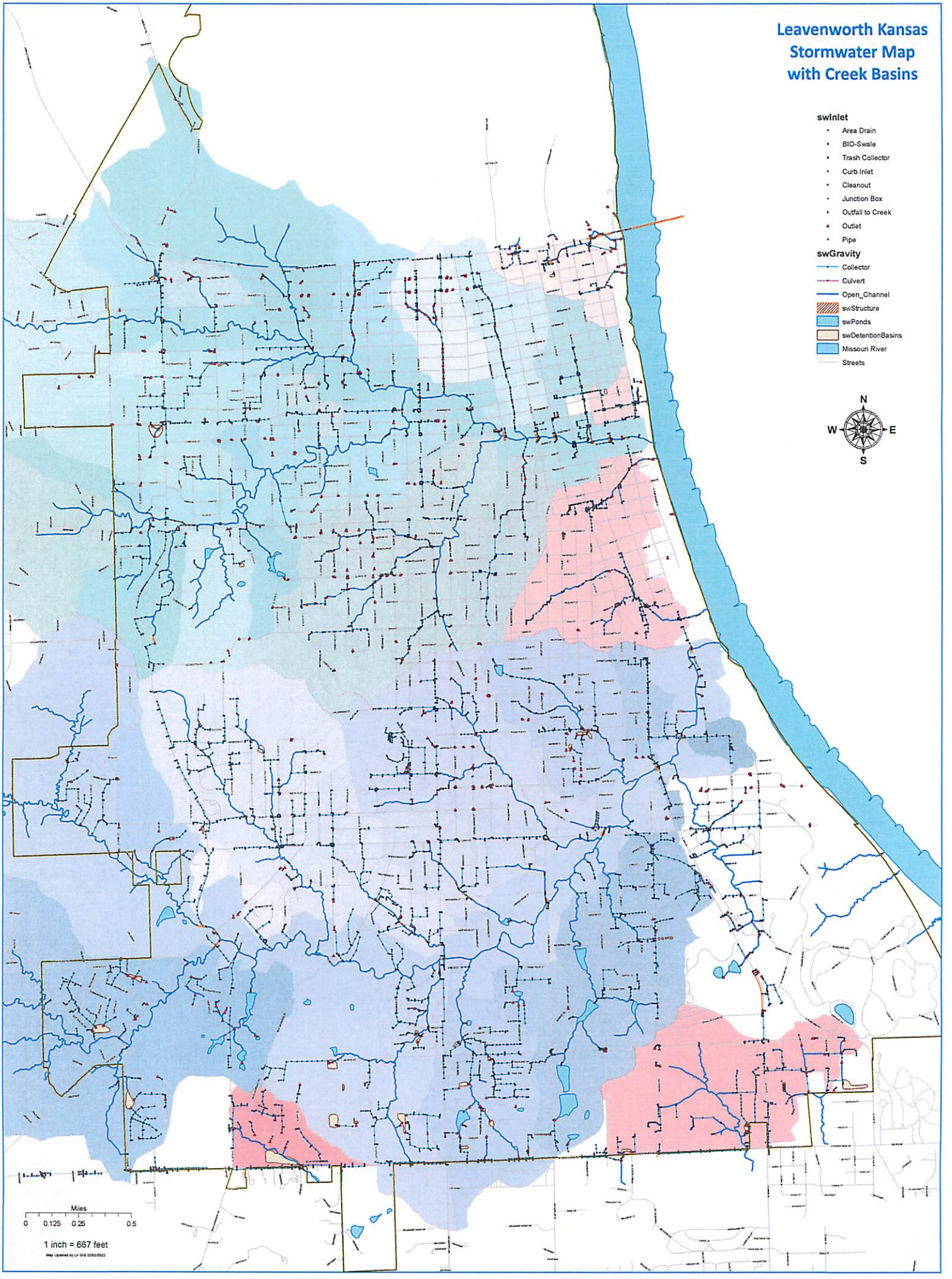
http://gis.firstcity.org/

https://www.leavenworthks.org/publicworks/page/mapping-gis-division

City of Leavenworth, KS
Stormwater Management Data Collection



Map Revised by City of LV GIS
02/12/2021


Leavenworth Kansas
Stormwater Map
with Creek Basins
swInlet
Area Drain
BIO-Swale
Trash Collector
Curb Inlet
Cleanout
Junction Box
Outfall to Creek
Outlet
Pipe
swGravity
Collector
Culvert
Open_Channel
swStructure
swPonds
swDetentionBasins
Missouri River
Streets
N
W
E
S
Miles
0 0.125 0.25 0.5
1 inch = 667 feet