Storm Drainage

<u>Mission</u>: To enhance public safety and property values by minimizing property damage from flooding and erosion, protection of stormwater quality, enforcement of local regulations, and compliance with federal and state law.

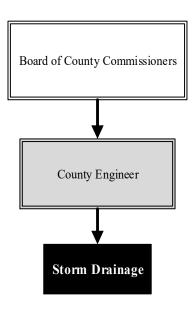
Scott Lindebak, P.E. Stormwater Engineer

1144 S. Seneca St. Wichita, KS 67217 316.660.1777

scott.lindebak@sedgwick.gov

Overview

The programs of Storm Drainage: Stream Maintenance, Flood Control, and Stormwater Management, prevent or minimize flood damage by shaping and clearing streambeds managing drainage in the county's unincorporated areas. Staff reviews stormwater requirements developments, provides planning and permitting services for capital improvement projects, and conducts oversees long-term and planning of drainage enhancements in unincorporated Sedgwick County. Of particular note is the Department's continuing and successful effort to improve flow on Jester Creek. Storm Drainage jointly funds maintenance of Wichita-Valley Center Flood Control Project with the City of Wichita.



Strategic Goals:

- Protect the County's infrastructure by keeping watercourses free from obstruction
- Protect the investment in the Wichita-Valley Center Flood Control Project by supporting an effective maintenance program
- Improve stormwater quality and the environment through an effective stormwater management program

Highlights

- Cut brush and removed sediment from over 35 drainage structures along township roads
- Completed stream bank stabilization of a tributary to the Ninnescah River at 119th Street South and 135th Street West
- Removed channel blockages in Afton Creek, west of Tyler Road



Accomplishments and Strategic Results

Accomplishments

The Storm Drainage Department has provided joint funding with the City of Wichita to ensure upkeep and maintenance of the Wichita-Valley Center Flood Control project, also known as the M.S. Mitch Mitchell Floodway or the "Big Ditch", to annually meet Federal regulations. The Stream Maintenance Program has worked to improve water flow along several County streams, including Dry Creek, Jester Creek, and Cowskin Creek. This time-consuming process involves meeting with property owners to explain the project and gain permission to access private property if necessary. The Stream Maintenance crew is meticulous to leave property in the same or better condition than when it arrived. The Program has also successfully restored natural habitats in waterways to ensure the preservation of endangered species. The Storm Drainage Department has also reached an agreement with the Kansas Department of Wildlife, Parks, and Tourism (KDWPT) to streamline project approvals and reduce regulatory burdens on citizens and Sedgwick County as it relates to threatened and endangered species in the State. Sedgwick County is the only local unit of government in Kansas to reach such an agreement with KDWPT.

Strategic Results

Storm Drainage continues to maintain operations with limited resources; proactively clearing debris and vegetation from County maintained streams and drainage structures to reduce or eliminate impact on property owners and infrastructure; and ensuring environmental compliance through the timely acquisition of permits. In addition, a priority for Storm Drainage is to continue the improvements of toe drains on the M. S. "Mitch" Mitchell Floodway (the "Big Ditch") to ensure levee certification in 2023. This certification of 100 miles of levees is required by the Federal Emergency Management Agency (FEMA) and keeps property owners from increased insurance rates.

Storm Drainage has several strategic goals to track performance. One goal is the cleaning and repair of at least four hot spot streams. The 2021 measure for this was five hot spots. Hot spots are smaller projects that have a relatively big impact on a drainage system, for example a log jam or a series of log jams that are removed that clear a larger problem area. Another strategic goal was to clear 20 bridge openings of trees and debris. The 2021 result for this was 15 bridge openings.

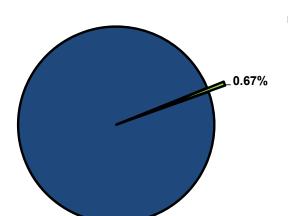


Significant Budget Adjustments

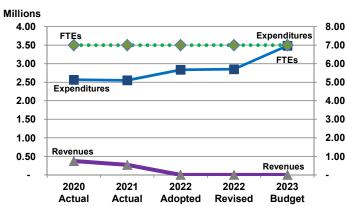
Significant adjustments to Storm Drainage's 2023 budget include an increase in funding for the Wichita-Valley Center Flood Control Program for major maintenance and repairs in the 2023 Capital Improvement Program (CIP) (\$1,360,187), a decease in interfund transfers due to 2022 CIP projects (\$925,000), and an increase in funding for Flood Control to match the funding agreement with the City of Wichita (\$173,698).

Departmental Graphical Summary

Storm DrainagePercent of Total County Operating Budget



Expenditures, Program Revenue & FTEs All Operating Funds



	2020	2021	2022	2022	2023	Amount Chg	% Chg
Expenditures	Actual	Actual	Adopted	Revised	Budget	'22 Rev'23	'22 Rev'23
Personnel	502,518	511,109	539,139	553,558	571,436	17,878	3.23%
Contractual Services	1,484,378	1,379,668	1,368,481	1,367,481	1,549,727	182,246	13.33%
Debt Service	-	-	-	-	-	-	
Commodities	3,733	2,628	4,000	5,000	2,700	(2,300)	-46.00%
Capital Improvements	-	-	925,000	-	1,360,187	1,360,187	
Capital Equipment	-	-	-	-	-	-	
Interfund Transfers	575,000	657,500	1	925,000	-	(925,000)	-100.00%
Total Expenditures	2,565,629	2,550,905	2,836,620	2,851,039	3,484,050	633,011	22.20%
Revenues							
Tax Revenues	-	-	-	-	-	-	
Licenses and Permits	=	=	-	-	-	-	
Intergovernmental	-	-	-	-	-	-	
Charges for Services	-	-	-	-	-	-	
All Other Revenue	372,802	268,391	-	-	-	-	
Total Revenues	372,802	268,391	-	-	-	-	
Full-Time Equivalents (FTEs	s)						
Property Tax Funded	7.00	7.00	7.00	7.00	7.00	-	0.00%
Non-Property Tax Funded	-	-	-	-	-	-	
Total FTEs	7.00	7.00	7.00	7.00	7.00		0.00%

Budget Summary by Fund							
Fund	2020 Actual	2021 Actual	2022 Adopted	2022 Revised	2023 Budget	Amount Chg	% Chg '22 Rev'23
General Fund	2,565,629	2,550,905	2,836,620	2,851,039	3,484,050	633,011	22.20%
Total Expenditures	2,565,629	2,550,905	2,836,620	2,851,039	3,484,050	633,011	22.20%

Significant Budget Adjustments from Prior Year Revised Budget

Increase in funding for 2023 CIP projects

Decrease in interfund transfers due to 2022 CIP projects

Increase in funding to match the Flood Control Agreement with the City of Wichita

Expenditures

1,360,187

(925,000)

173,698

Total 608,885 - -

					Total	608,885	=	-
Budget Summary by	/ Progra	am						
Program	Fund	2020 Actual	2021 Actual	2022 Adopted	2022 Revised	2023 Budget	% Chg '22 Rev'23	2023 FTEs
Stream Maintenance	110	705,151	598,369	629,037	639,995	659,757	3.09%	6.00
Flood Control	110	1,648,583	1,718,426	2,005,327	2,005,327	2,614,212	30.36%	-
Stormwater Management	110	211,895	234,111	202,256	205,716	210,081	2.12%	1.00
Total		2,565,629	2,550,905	2,836,620	2,851,039	3,484,050	22.20%	7.00

Personnel Summary By Fund								
			Budgeted Co	mpensation C	Comparison	FT	E Comparis	on
B T			2022	2022	2023	2022	2022	2023
Position Titles	Fund	Grade	Adopted	Revised	Budget	Adopted	Revised	Budget
Senior Engineer	110	GRADE136	-	84,247	84,247	-	1.00	1.00
Senior Engineer	110	GRADE135	84,247	-	-	1.00	-	-
Crew Foreman	110	GRADE124	55,862	56,160	56,160	1.00	1.00	1.00
Crew Chief Equipment Operator III	110 110	GRADE123 GRADE122	50,664 159,132	51,147 160,285	51,147 160,285	1.00 4.00	1.00 4.00	1.00 4.00
Equipment Operator III	110	GIVADE 122	139, 132	100,203	100,203	4.00	4.00	4.00
	Subtot	al			351,839			
		Add:						
			Personnel Savir		-			
			ation Adjustment		39,534			
			On Call/Holiday	Pay	6,000			
		Benefits			174,064			
	i otal P	ersonnel B	uaget		571,436	7.00	7.00	7.00

• Stream Maintenance

The Stream Maintenance Program serves Sedgwick County citizens by correcting obstructions within watercourses, reshaping bank lines to ensure the normal course of flow following flood conditions, and inspecting streams and other watercourses during prolonged rain and flood conditions to ensure protection of life and property.

The program's six-person staff performs the wide variety of work outlined above. They are assigned and use a variety of heavy equipment, principally bulldozers and tracked excavators, to accomplish their mission.

Fund(s)	: Count	v General	Fund	110

Expenditures	2020 Actual	2021 Actual	2022 Adopted	2022 Revised	2023 Budget	Amnt. Chg. '22 - '23	% Chg. '22 - '23
Personnel	388,133	393,487	415,097	426,055	441,039	14,984	3.5%
Contractual Services	238,285	202,254	209,940	208,940	216,018	7,078	3.4%
Debt Service	-	-	-	-	-	-	0.0%
Commodities	3,733	2,628	4,000	5,000	2,700	(2,300)	-46.0%
Capital Improvements	-	-	-	-	-	-	0.0%
Capital Equipment	-	-	-	-	-	-	0.0%
Interfund Transfers	75,000	=	-	-	-	-	0.0%
Total Expenditures	705,151	598,369	629,037	639,995	659,757	19,762	3.1%
Revenues							
Taxes	-	-	-	-	-	-	0.0%
Intergovernmental	-	=	-	-	-	-	0.0%
Charges For Service	-	-	-	-	-	-	0.0%
All Other Revenue	-	-	-	-	-	-	0.0%
Total Revenues	-	-	-	-	-	-	0.0%
Full-Time Equivalents (FTEs)	6.00	6.00	6.00	6.00	6.00		0.0%

Flood Control

The City-County Flood Control program inspects, operates, and maintains the Wichita-Valley Center Flood Control Project in accordance with standards established by the United States Army Corps of Engineers (USACE). This program is administered by the City of Wichita's Public Works Department and is funded equally by the City of Wichita and Sedgwick County.

The Wichita-Valley Center Flood Control Project includes 40.9 miles of channels, 97.0 miles of levees, and total area of 5,613 acres. Maintenance of the flood control project includes mowing, clearing draining structures, removing debris from bridges and other structures, grading levees and roadways, repairing erosion, stabilizing banks, and repairing fences and gates.

Fund(s): County General Fund 110

Expenditures	2020 Actual	2021 Actual	2022 Adopted	2022 Revised	2023 Budget	Amnt. Chg.	% Chg.
Personnel	=	=	-	-	-	-	0.0%
Contractual Services	1,148,583	1,060,926	1,080,327	1,080,327	1,254,025	173,698	16.1%
Debt Service	-	-	-	-	-	· <u>-</u>	0.0%
Commodities	-	-	-	-	-	-	0.0%
Capital Improvements	-	-	925,000	-	1,360,187	1,360,187	0.0%
Capital Equipment	-	-	-	-	-	<u>-</u>	0.0%
Interfund Transfers	500,000	657,500	-	925,000	-	(925,000)	-100.0%
Total Expenditures	1,648,583	1,718,426	2,005,327	2,005,327	2,614,212	608,885	30.4%
Revenues							
Taxes	-	-	-	-	-	-	0.0%
Intergovernmental	-	-	-	-	-	-	0.0%
Charges For Service	-	-	-	-	-	-	0.0%
All Other Revenue	372,802	268,391	-	-	-	-	0.0%
Total Revenues	372,802	268,391	-	-	-	-	0.0%
Full-Time Equivalents (FTEs)	-	-	-	-	-	-	0.0%

• Stormwater Management

Stormwater Management provides citizens a single point of contact for drainage issues within the unincorporated areas of the county. Equally important is the capability to implement a comprehensive approach to stormwater planning and design. Established in 2001, the program has been responsible for a series of drainage projects beginning in the 2001 Capital Improvement Program. These drainage projects occupy a significant portion of the program's time, as does the design of future projects. The program has a wide variety of responsibilities that include implementation of Phase II of the National Pollutant Discharge Elimination System (NPDES), a federal mandate.

Fund(s)): County	/ General	Fund 110

Expenditures	2020 Actual	2021 Actual	2022 Adopted	2022 Revised	2023 Budget	Amnt. Chg. '22 - '23	% Chg. '22 - '23
Personnel	114,385	117,622	124,042	127,502	130,397	2,894	2.3%
Contractual Services	97,510	116,488	78,214	78,214	79,684	1,470	1.9%
Debt Service	-	-	-	-	-	-	0.0%
Commodities	-	-	-	-	-	-	0.0%
Capital Improvements	-	-	-	-	-	-	0.0%
Capital Equipment	-	-	-	-	-	-	0.0%
Interfund Transfers	-	-	-	-	-	-	0.0%
Total Expenditures	211,895	234,111	202,256	205,716	210,081	4,364	2.1%
Revenues							
Taxes	-	-	-	-	-	-	0.0%
Intergovernmental	-	-	-	-	-	-	0.0%
Charges For Service	-	-	-	-	-	-	0.0%
All Other Revenue	-	-	-	-	-	-	0.0%
Total Revenues	-	-	-	-	-	-	0.0%
Full-Time Equivalents (FTEs)	1.00	1.00	1.00	1.00	1.00		0.0%