

Sewer**Function: Public Works & Transportation***Budget Overview*

Agency Budget by Fund

	2018 Actual	2019 Adopted	2019 Actual	2020 Adopted	2021 C2C	2021 Request
Sewer Utility	39,821,979	40,684,110	35,539,747	46,176,529	46,121,359	51,329,180
TOTAL	\$ 39,821,979	\$ 40,684,110	\$ 35,539,747	\$ 46,176,529	\$ 46,121,359	\$ 51,329,180

Agency Budget by Service

	2018 Actual	2019 Adopted	2019 Actual	2020 Adopted	2021 C2C	2021 Request
Sewer Engineering & Admin	11,784,692	12,428,824	6,518,602	14,377,990	14,367,070	16,689,439
Sewer Operations	28,037,287	28,255,286	29,021,144	31,798,539	31,754,289	34,639,741
TOTAL	\$ 39,821,979	\$ 40,684,110	\$ 35,539,747	\$ 46,176,529	\$ 46,121,359	\$ 51,329,180

Agency Budget by Major-Revenue

	2018 Actual	2019 Adopted	2019 Actuals	2020 Adopted	2021 C2C	2021 Request
Intergov Revenues	(115,155)	(111,060)	(106,594)	(98,270)	(98,270)	(78,030)
Charges For Services	(37,738,269)	(39,341,760)	(40,766,444)	(44,658,550)	(44,614,300)	(49,346,360)
Licenses & Permits	(51,202)	(20,000)	(52,694)	(30,200)	(30,200)	(51,600)
Fine & Forfeiture	(1,253,375)	(620,000)	(997,474)	(620,000)	(620,000)	(1,070,000)
Investments & Other Contributions	(549,674)	(480,000)	(662,476)	(450,000)	(450,000)	(650,000)
Misc Revenue	(1,355)	(1,290)	(20,471)	(1,290)	(1,290)	(1,390)
Other Financing Source	(107,249)	(110,000)	7,734,626	(318,219)	(307,299)	(131,800)
Transfer In	(5,700)	-	(668,219)	-	-	-
TOTAL	(39,821,979)	(40,684,110)	(35,539,747)	(46,176,529)	(46,121,359)	(51,329,180)

Agency Budget by Major-Expenses

	2018 Actual	2019 Adopted	2019 Actuals	2020 Adopted	2021 C2C	2021 Request
Salaries	2,869,768	3,354,024	3,019,612	3,539,574	3,534,712	3,406,042
Benefits	1,178,380	1,250,641	1,438,261	1,401,922	1,394,740	1,594,864
Supplies	468,869	481,000	509,491	529,500	538,360	504,660
Purchased Services	25,414,552	25,056,304	26,024,670	28,239,857	28,250,375	31,407,767
Debt & Other Financing	7,195,150	7,406,771	1,666,418	9,360,621	9,360,621	10,185,459
Inter Depart Charges	3,107,797	3,491,870	3,171,718	3,539,055	3,486,551	3,213,388
Inter Depart Billing	(424,563)	(394,000)	(472,756)	(444,000)	(444,000)	(483,000)
Transfer Out	12,026	37,500	182,332	10,000	-	1,500,000
TOTAL	\$ 39,821,979	\$ 40,684,110	\$ 35,539,747	\$ 46,176,529	\$ 46,121,359	\$ 51,329,180



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Deputy Division Manager
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Principal Engineer 2
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Christopher J. Petykowski, P.E.
Janet Schmidt, P.E.
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Christina M. Bachmann, P.E.
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James M. Wolfe, P.E.
Facilities & Sustainability
Bryan Cooper, Principal Architect
Mapping Section Manager
Eric T. Pederson, P.S.
Financial Manager
Steven B. Danner-Rivers

**To: Mayor Satya Rhodes-Conway
Dave Schmiedicke, Finance Director**

From: Robert F Phillips P.E., City Engineer

Date: July 10, 2020

Subject: Sewer Utility 2021 Operating Budget

The Engineering Division is pleased to submit our 2021 Operating Budget for the Sewer Utility, a utility funded entirely through user fees.

Major Goals

The primary objective of the City of Madison’s Sewer Utility is to safely convey wastewater to the Nine Springs Wastewater Treatment Plant. This requires a combination of design, construction and maintenance of our system of sewers and lift stations. Through our activities, infiltration is reduced, pipes in poor condition are repaired or replaced, pipes are cleaned on a regular schedule and problematic sections of pipes are maintained more frequently. The result has been a reliable system with a record low number of sewer backups.

In addition to the routine activities associated with running the Sewer Utility, specific 2021 initiatives include the following:

- Create a sewer capacity model for the high residential growth areas downtown including the UW campus area and the isthmus area east of the Capitol and west of the Yahara River,
- Study drainage areas that have a history of excessive clear water infiltrating into the sewer system during severe rain events,
- Continue working on the televising and condition rating for sanitary sewers on a 10 year cycle in accordance with our Capacity, Management, Operation, and Maintenance (CMOM) plan with the Wisconsin Department of Natural Resources (WDNR),
- Identify sewers to be lined with our sewer lining program which is our most cost effective rehabilitation method for sanitary sewer.

COVID Response & Recovery

The Sewer Utility is impacted by the pandemic and measures have been put in place in 2020 to reduce expenditures. Sewer use fees are based on water usage. Water usage is lower in the commercial sector and at the University as most staff and students are not present. Residential usage is up some but does not make up for the losses in other sectors. Treatment charges will be down as well partially offsetting the loss in revenue but as of the time of this budget submittal, we have not yet received our 2020 second quarter bill from the Sewerage District. Once the second quarter bill is received from the Sewerage District, we will have a better sense of the impact of the pandemic on the Utility. Revisions to this budget may be necessary and we anticipate any changes could be done over the next month.

2021 Request & Equity

Reliable sanitary sewer service is essential to protecting public health. Sewer repair and maintenance is based on pipe/pump station condition, history of clogging, and other needs to assure this service is provided equitably.

We will continue working to increase the diversity of our workforce by actively recruiting women and people of color. This includes a variety of activities including, but not limited to, using the Equitable Hiring Tool; developing an individual outreach and recruitment plan for external hiring processes; participating in targeted job and career fairs, outreach activities at local schools and community events; and filling positions at the trainee level.

2021 Request & Sustainability

More frequent intense storms from climate change impact the sewer utility. High ground water levels, high lake levels and flooding are common in Madison and elsewhere today. When storm water enters the sanitary sewer system, treatment costs increase. Sewer Utility staff are constantly monitoring the system to help determine where the greatest needs are. The Sewer Utility's increased use of trenchless methods of repair and rehabilitation where feasible is a triple win – it's less expensive than traditional open cut methods of construction, it's faster and less disruptive to our residents and businesses, and it has a significantly lower carbon footprint than traditional open cut methods of construction. Our staff are continually researching new materials and methods to reduce our impact on the environment.

Major Changes in the 2021 Operating Budget

There are no major changes currently proposed however, as noted in the Covid Response Section above, adjustments to this budget may be needed once we learn more about the magnitude of the impact of the pandemic.

Summary of Reductions

None.

Impact on rates

A 10% rate increase is expected. The increase is due to additional debt service associated with capital projects and increased charges from the Madison Metropolitan Sewerage District.

c.c. Laura Larsen, Budget and Program Evaluation Manager
Stephanie Mabrey, Budget Analyst
Christie Baumel, Deputy Mayor
Steve Danner-Rivers, Engineering Finance Manager
Kathy Cryan, Deputy Division Manager
Greg Fries, Deputy City Engineer

2021 Operating Budget Service Budget Proposal

IDENTIFYING INFORMATION

SELECT YOUR AGENCY:

Sewer Utility

SELECT YOUR AGENCY'S SERVICE:

Sewer Engineering and Administration

SERVICE NUMBER:

831

SERVICE DESCRIPTION:

This service is responsible for: (1) the inspection, design, evaluation, and construction of the City's sewer collection system, (2) reviewing and inspecting permits related to sanitary sewer system excavation and plugging (3) collection of sewer area connection fees as well as impact fees related municipal sewer improvements. The goal of this service is to centrally plan and monitor the City's sewer system.

Part 1: Base Budget Proposal

BUDGET INFORMATION

	2018 Actual	2019 Adopted	2019 Actual	2020 Adopted	2021 C2C	2021 Request
<i>Budget by Fund</i>						
General-Net	\$0	\$0	\$0	\$0	\$0	\$0
Other-Expenditures	\$12,269,681	\$12,428,824	\$6,518,602	\$14,377,990	\$14,367,070	\$16,689,439
<i>Total</i>	<i>\$12,269,681</i>	<i>\$12,428,824</i>	<i>\$6,518,602</i>	<i>\$14,377,990</i>	<i>\$14,367,070</i>	<i>\$16,689,439</i>
<i>Budget by Major</i>						
Revenue	(\$12,269,681)	(\$12,428,824)	(\$6,518,602)	(\$14,377,990)	(\$14,367,070)	(\$16,689,439)
Personnel	\$1,433,132	\$1,874,949	\$1,730,261	\$1,959,356	\$1,990,472	\$2,058,129
Non-Personnel	\$8,444,925	\$8,010,218	\$2,453,753	\$9,921,836	\$9,932,304	\$12,269,922
Agency Billings	\$2,391,624	\$2,543,657	\$2,334,588	\$2,496,798	\$2,444,294	\$2,361,388
<i>Total</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
FTEs		13.57		13.77	13.77	13.77

PRIORITY

Citywide Element

Describe how this service advances the Citywide Element:

Green & Resilient - The Sewer Utility is a leader in stewardship of our water resources. We are committed to eliminating preventable sewer back up and sanitary sewer overflow to protect the public health and environment.

Effective Government - The Sewer Utility provides efficient and reliable service that supports all Madison residents and businesses. We collaborate with the Wisconsin Department of Natural Resources, Madison Metropolitan Sewerage District, private developers, and other stakeholders to improve efficient and achieve our shared goals.

ACTIVITIES PERFORMED BY THIS SERVICE

Activity	% of Effort	Description
Utility Management and Administration	30	Plan, direct, and implement sanitary sewer infrastructure design, construction, operations, and maintenance. Provide technical engineering advice and recommendations to City officials. Oversee Utility personnel, budgeting, financial management, asset management, permitting, public information and community engagement, interdepartmental planning and coordination, Board and Commission

support, and related administrative and technical activities.

Design	20	Planning, design and project management for new and replacement or rehabilitation of aging sanitary sewer infrastructure.
Construction Inspection	45	Manage sanitary sewer construction of Public Works projects to assure construction complies with plans and specifications. Oversee day-to-day construction activities from pre-bid meeting to warranty closeout. Review and respond to RFIs and change order requests. Track quantities and authorize partial and final payments. Prepare as-builts. Perform preliminary surveys, construction staking, and as-built surveys.
GIS	5	Create and maintain sanitary sewer infrastructure assets (e.g. pipes, structures, laterals, lift stations, etc.) in GIS for asset and work order management.

SERVICE BUDGET CHANGES

Service Impact

What is the proposed change to the service's budget from cost to continue to agency request?

What are the service level impacts of the proposed funding changes?

Personnel-Permanent Positions

Are you proposing an allocation change to the FTEs for this service?

Type	Fund	Amount	Description
Perm Wages	<input type="text"/>	<input type="text"/>	<input type="text"/>
Benefits	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total		<input type="text" value="\$0"/>	

Explain the assumptions behind the allocation change.

What is the justification behind the allocation change?

Personnel-Other Personnel Spending

Are you requesting additional personnel spending for non-annualized pay?

Type	Fund	Amount	Description
Overtime	<input type="text"/>	<input type="text"/>	<input type="text"/>
Premium Pay	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hourly	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total		<input type="text" value="\$0"/>	

Explain the assumptions behind the requested funding.

What is the justification behind the increased funding?

Revenue

Are you proposing a change to the service's budgeted revenue?
2021 Operating Budget: Agency Requests

Yes

Are you proposing an increase or a decrease to the budgeted revenue?

Increase

Fund	Major	Amount	Description
2110	4xxxx	\$2,322,369	Increase in Customer Revenue, Assessment Payments, Interest Earnings and Trade-In Revenue

Explain the assumptions behind the change to budgeted revenue.

Based on past experience and the needs of the utility.

What is the justification behind the proposed change?

Customer revenue increased to offset cash reserves needed for Capital. Cash Reserves have a significant impact on bond ratings and the Sewer Utility borrows every other year so we need sufficient cash on hand.

Non-Personnel

Are you requesting additional non-personnel funding for this service?

Yes

Fund	Major	Amount	Description
2110	54xxx	\$34,567	Mostly from a \$45,000 increase for Bad Debt Expense
2110	56xxx	\$825,121	Principal/Interest/Amortization and Contingent Reserve

Explain the assumptions behind the requested funding.

The Sewer Utility began recognizing bad debt expense in 2019. Previously amounts written off for bankruptcies was taken against revenue. This has been corrected.

Principal/Interest increase of \$96,000 reflective of paying off 2008 bonds last year and the sale of bonds in 2020.

What is the justification behind the increased funding?

Corrected a prior accounting issue that only was discovered last year.

Updated debt service projection.

Part 2: Proposed Budget Reduction

What is 5% of the agency's net budget?

\$0

What is the proposed reduction to this service's budget?

\$0

Explain how you would change the activities and the level of service as a result of implementing the funding decrease to this service. List changes by service activity identified above. Add a separate line for each reduction.

Activity	\$Amount	Description
Total	\$0	

Explain the changes by major expenditure category that your agency would implement as a result of the funding decrease to this service.

Name	\$ Amount	Description
Personnel		
Non-Personnel		
Agency Billings		
Total	\$0	

Is the City mandated to perform the activities of this service? If so, explain the mandate and mandated service level. If not, are there other local organizations also involved in performing these activities.

Has this reduction been proposed in prior years?

Does the proposed reduction result in eliminating permanent positions?

If yes, what is the decrease in FTEs:

Does the proposed reduction impact other agencies (i.e. Fleet Services)?

If yes, which agencies:

Describe why the proposed reduction was chosen.

Explain the impacts of the proposed reduction on the end user of the service. How can impacts of this reduction be mitigated?

2021 Operating Budget

Service Budget Proposal

IDENTIFYING INFORMATION

SELECT YOUR AGENCY:

Sewer Utility

SELECT YOUR AGENCY'S SERVICE:

Sewer Operations

SERVICE NUMBER:

832

SERVICE DESCRIPTION:

This service is responsible for the operation and maintenance of the City's sanitary sewer system which consists of 785 miles of sanitary sewer mains connected by more than 19,000 sanitary access structures. This system is supported by 30 pumping stations and transports 30 million gallons of raw sewage per day from Madison homes and businesses to the Nine Springs Wastewater Treatment Plant (WWTP). The goal of this service is to eliminate preventable main backups and overflows and convey wastewater to the WWTP with minimum inflow, infiltration and exfiltration to prevent public health hazards and protect the environment.

Part 1: Base Budget Proposal

BUDGET INFORMATION

	2018 Actual	2019 Adopted	2019 Actual	2020 Adopted	2021 C2C	2021 Request
<i>Budget by Fund</i>						
General-Net	\$0	\$0	\$0	\$0	\$0	\$0
Other-Expenditures	\$28,278,852	\$28,303,877	\$29,021,145	\$31,798,539	\$31,754,289	\$34,639,741
<i>Total</i>	<i>\$28,278,852</i>	<i>\$28,303,877</i>	<i>\$29,021,145</i>	<i>\$31,798,539</i>	<i>\$31,754,289</i>	<i>\$34,639,741</i>
<i>Budget by Major</i>						
Revenue	(\$28,278,852)	(\$28,303,877)	(\$29,021,145)	(\$31,798,539)	(\$31,754,289)	(\$34,639,741)
Personnel	\$2,615,016	\$2,729,716	\$2,727,612	\$2,982,140	\$2,938,980	\$2,942,777
Non-Personnel	\$25,372,225	\$25,019,948	\$25,929,159	\$28,218,142	\$28,217,052	\$31,327,964
Agency Billings	\$291,611	\$554,213	\$364,374	\$598,257	\$598,257	\$369,000
<i>Total</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
FTEs		30.98		30.30	30.30	30.30

PRIORITY

Citywide Element

Describe how this service advances the Citywide Element:

Protect public health and the environment by eliminating preventable sewer back ups and overflows.

ACTIVITIES PERFORMED BY THIS SERVICE

Activity	% of Effort	Description
Preventive Maintenance	48	Scheduled sewer main cleaning to maintain existing system functionality and eliminate preventable sewer main backups.
Repair	22	Open cut and trenchless pipe and structure repairs to maintain existing system functionality, reduce I&I, and extend useful life.
Inspection and Condition Assessment	10	

		Internal pipeline and structure inspection to assess condition and develop asset condition rating score. Provide onsite inspection of trenchless rehab projects to assure work is done per plans and specifications to protect ratepayers investment. Perform flow monitoring, smoke testing, and dye testing to support capacity and I&I studies. Perform Q&Q sampling to determine industrial customer billing rates.
Utility Locating	9	Respond to Digger's Hotline requests to locate and mark underground sanitary sewer utilities to prevent damage during excavation.
Contracted Services	7	Provide sewer cleaning and CCTV inspection service for other City agencies and external customers (e.g. Air National Guard, Dane County Landfill, and Madison Metropolitan Sewerage District).
Emergency Response	3	Emergency response to reports of sewer back ups, sanitary sewer overflows, sewer gas odors, missing covers, etc.
Other	1	Respond to calls from residents reporting dead animals in the public right-of-way, sinkholes, etc. Inspect and oversee maintenance of public waste oil sites.

SERVICE BUDGET CHANGES

Service Impact

What is the proposed change to the service's budget from cost to continue to agency request?

What are the service level impacts of the proposed funding changes?

Personnel-Permanent Positions

Are you proposing an allocation change to the FTEs for this service?

Type	Fund	Amount	Description
Perm Wages	<input type="text"/>	<input type="text"/>	<input type="text"/>
Benefits	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total		<input type="text" value="\$0"/>	

Explain the assumptions behind the allocation change.

What is the justification behind the allocation change?

Personnel-Other Personnel Spending

Are you requesting additional personnel spending for non-annualized pay?

Type	Fund	Amount	Description
Overtime	<input type="text"/>	<input type="text"/>	<input type="text"/>
Premium Pay	<input type="text"/>	<input type="text"/>	<input type="text"/>
Hourly	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total		<input type="text" value="\$0"/>	

Explain the assumptions behind the requested funding.

What is the justification behind the increased funding?

Revenue

Are you proposing a change to the service's budgeted revenue?

Are you proposing an increase or a decrease to the budgeted revenue?

Fund	Major	Amount	Description
2110	4xxxx	\$2,885,452	Primarily Customer Revenue

Explain the assumptions behind the change to budgeted revenue.

What is the justification behind the proposed change?

Non-Personnel

Are you requesting additional non-personnel funding for this service?

Fund	Major	Amount	Description
2110	54xxx	\$3,122,542	Primarily Sewer Treatment Costs (MMSD)

Explain the assumptions behind the requested funding.

What is the justification behind the increased funding?

Part 2: Proposed Budget Reduction

What is 5% of the agency's net budget?

What is the proposed reduction to this service's budget?

Explain how you would change the activities and the level of service as a result of implementing the funding decrease to this service. List changes by service activity identified above. Add a separate line for each reduction.

Activity	\$Amount	Description
Total	\$0	

Explain the changes by major expenditure category that your agency would implement as a result of the funding decrease to this service.

Name	\$ Amount	Description
Personnel		
Non-Personnel		
Agency Billings		
Total	\$0	

Is the City mandated to perform the activities of this service? If so, explain the mandate and mandated service level. If not, are there other local organizations also involved in performing these activities.

Has this reduction been proposed in prior years?

Does the proposed reduction result in eliminating permanent positions?

If yes, what is the decrease in FTEs:

Does the proposed reduction impact other agencies (i.e. Fleet Services)?

If yes, which agencies:

Describe why the proposed reduction was chosen.

Explain the impacts of the proposed reduction on the end user of the service. How can impacts of this reduction be mitigated?