



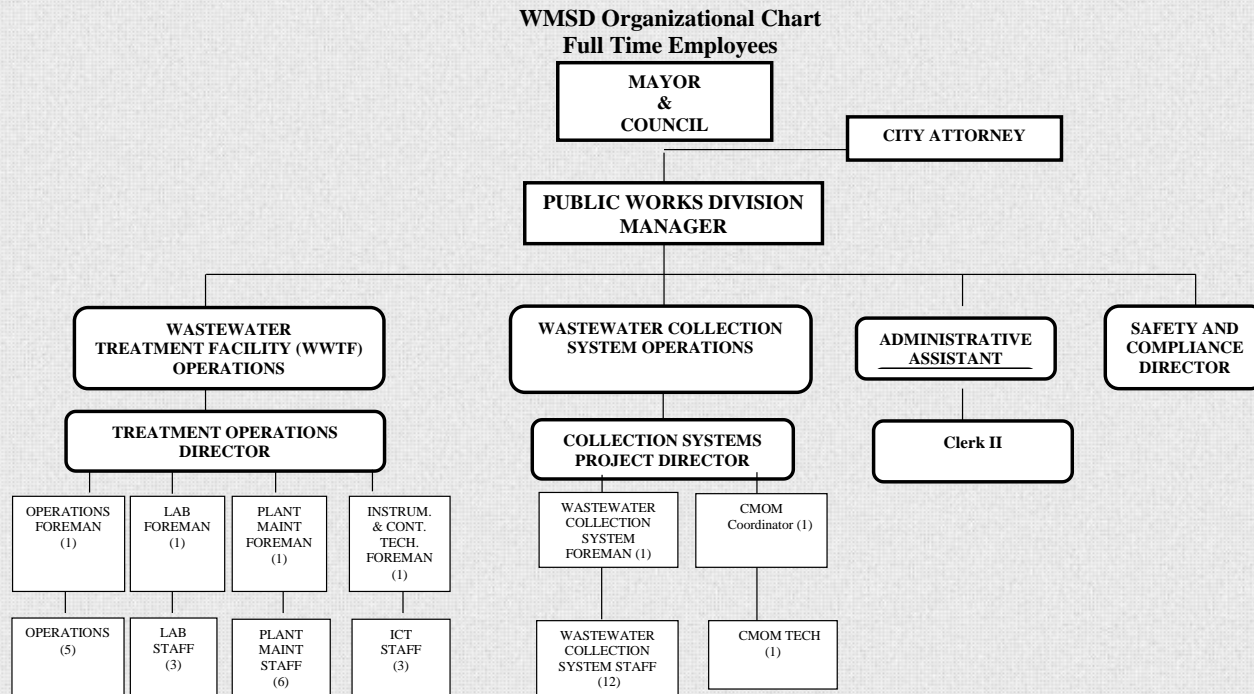
Waste Management Services

FY 22 Budget Presentation

CITY OF WATERLOO BUDGET



Public Works Division



Our Mission

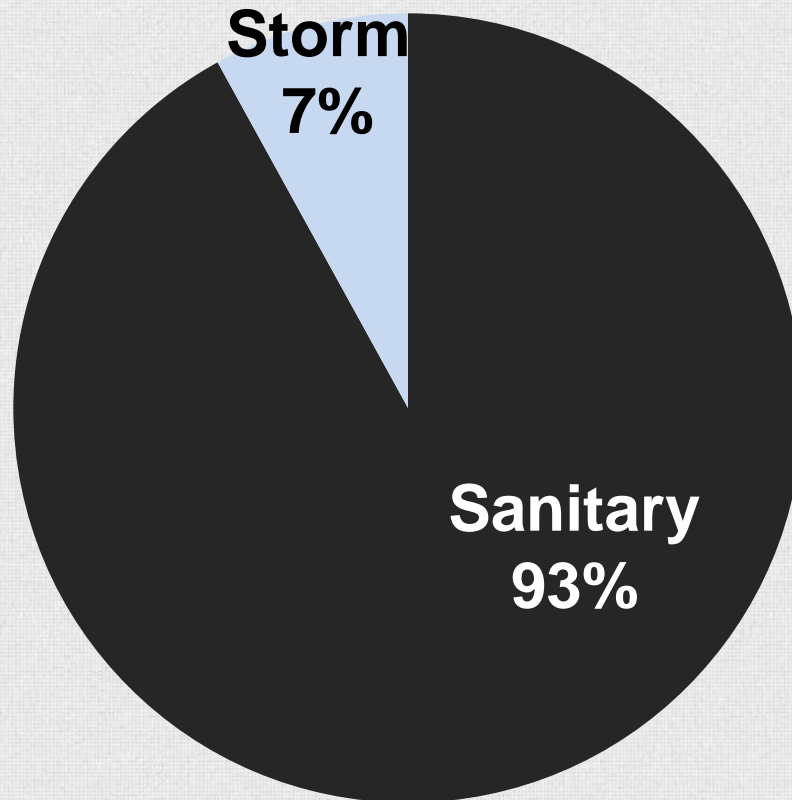
- “The Mission of Waste Management Services Department (WMSD) is “to properly operate and maintain the collection system infrastructure, transporting and treating wastewater **without disruption or overflows**, while meeting the needs of Waterloo’s citizens, **protecting surface and groundwater resources** and **complying with all Federal and State regulations**.”
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Major Accomplishments

- ✓ Completion of Wing Dike Project. Through Legal Appeal the IDNR agreed to reinstate previous Waste Load Allocation of Permit Limits.
- ✓ Satellite Wet Well Project continues. Crossover Structure on Lafayette near completion.
- ✓ Dry Run Creek Interceptor and Lift Station work continues. Completion scheduled March 2021.
- ✓ Biosolids Contract #994 construction at full steam. Currently at 40% completion.
- ✓ Discussions continuing with City of Evansdale on acceptance of wastewater flow.
- ✓ Digester #3 Cover Modifications Contract #1021 at 90% Complete. Full completion expected 5/1/2021
- ✓ Cleaned and replaced all Aeration Membranes in Easton Aeration Basin 3. This meets our schedule of cleaning and replacing membranes of one basin per year/next 4 years. Easton Aeration Basin 4 will be rebuilt 2021
- ✓ CIPP Phase IVA work complete in November 2020.
- ✓ Titus Lift Station and Force Main design work underway and expected to be bid in summer 2021.
- ✓ In-house Smoke Testing in September and October 2020 to identify deficiencies in the W. 4th St and Russell Rd and Cedar River areas, including discovery and repair of a hole in a 48" line along the river.
- ✓ Removal of 16 Storm Sewer Cross-Connects from the sanitary system in 2020.
- ✓ Phase II West Side Interceptor Manhole Inspections complete in May 2020.
- ✓ Large diameter sanitary sewer cleaning: 3200' in SA 14 and 1400' in SA 19

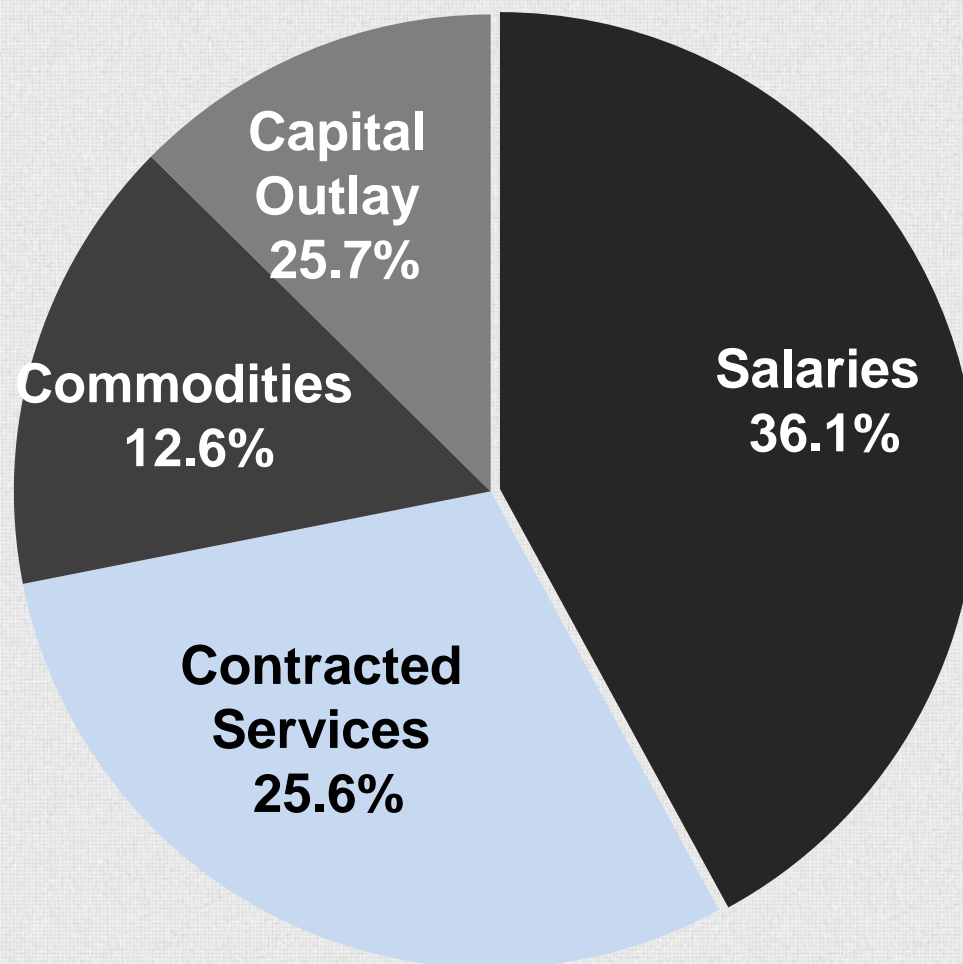
WMS Enterprise Funded



<i>Sanitary</i>	\$9,402,917
<i>Storm</i>	\$691,310
<i>Total</i>	\$10,094,227



Sanitary Sewer Budget



Budget for Chemicals

CHEMICALS	VENDOR	PRICE PER LOAD	ANNUAL LOADS	UNITS	ANNUAL COST \$
Magnesium Hydroxide	Brentag	\$9,302	10	\$0.19/lb	\$83,718
Polly Aluminum Chloride	Rhino	\$9,570	3	\$0.21/lb	\$38,280
Polymer For Thickeners and Filter Bld	Rhino	\$28,880	8	8,800 lb	\$173,280
Struvite Removal	Guard	\$18,675	2	1,375 Gallons	\$37,350
Incidental Chemicals De-Foamers Etc	Rhino	2,000	2	50 Gallons	\$4,000
					\$336,628

History	
FY	Cost
FY14	\$334,627
FY15	\$290,375
FY16	\$252,669
FY17	\$396,341
FY18	\$358,517
FY19	\$330,000
FY20 (projected)	\$340,000



2020

Sanitary Sewer Cleaning

- Sewer Maintenance cleaned 45 miles
 - Additional 1 mile cleaned in CIPP Phase IVA
- Reached 60% of CMOM Program Annual Goal to clean entire system every 5 years.



- * large dia. cleaning projects
- * June/July rain events
- * restrictions due to COVID-19



2020

Sanitary Sewer Televising

- Sewer Maintenance televised 27 miles
 - Additional 1 mile televised in CIPP Phase IVA
- 80% of CMOM Program Annual Goal to inspect entire system every 10 years.



2020 Smoke Testing

- Sewer Mtce and CMOM Staff performed smoke testing to identify sources of I/I in targeted areas:
 - West 4th Street and Russell Road
 - Cedar River
- Inspected 5.4 miles of sanitary sewer
- Discovered and repaired hole in 48" line
- Identified 30 potential sources of inflow

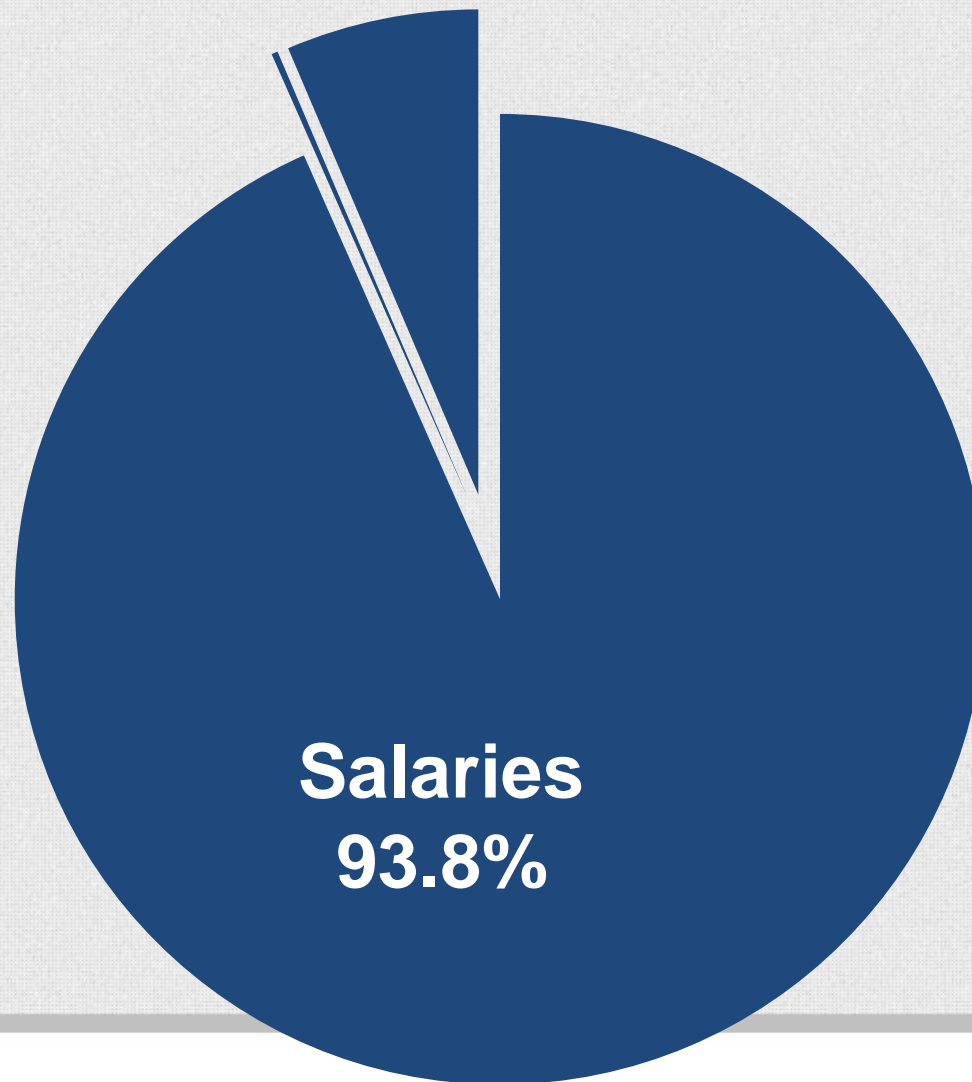




Smoke Test Setup

West 4th Street and Russell Road

Storm Sewer Budget



Storm Water Work

4/1/2019 – 3/31/2020

- 8,759 ft Storm Pipe Televised
- 9,094 ft Storm Pipe Cleaned
- 1,100 Catch Basins Cleaned
- 23 Catch Basins Repaired/Replaced
- 8 Culverts Cleaned
- 11 Waterways Cleaned
- 6 Trash Racks cleaned
- 97 Flood Gates Maintained



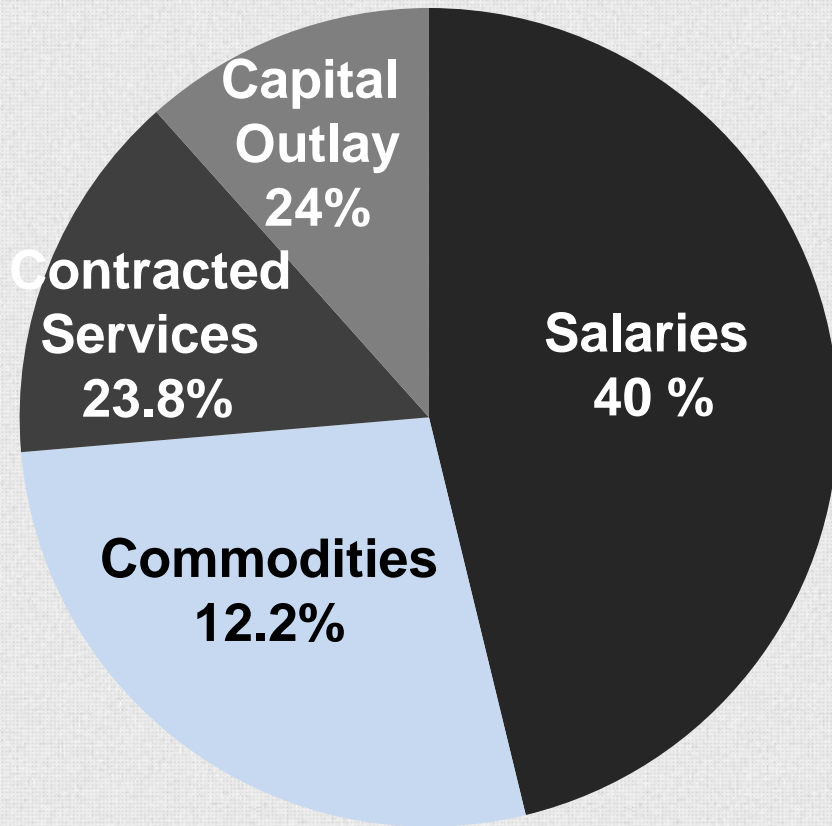
DNR Events

SSO, Basement Backups, Bypassing

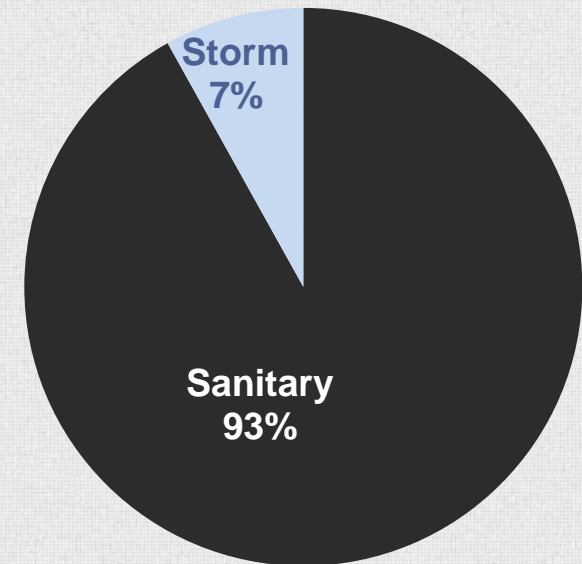
Year	Total DNR Events(SSO, Basement Backup, Bypass)	Root Related	Root %	Rains Related	Rains %	FOG Related	FOG %	Other (Deposits, Debris, Power Fail, Structural, etc.)	Other %
2014	52	11	21%	34	65%	1	2%	6	12%
2015	19	9	47%	6	32%	2	10.5%	2	10.5%
2016	25	10	40%	14	56%	0	0%	1	4%
2017	16	7	44%	0	0%	1	6%	8	50%
2018	137	14	10%	122	89%	0	0%	1	1%
2019	42	4	90%	25	60%	2	5%	11	26%
2020	158	6	4%	145	92%	2	1%	5	3%
Total	449	61	14%	346	77%	8	1%	34	8%



Total WMS Budget Breakdown



Percentages by Fund



Categories	Sanitary		Storm		Total	
Salaries	\$3,398,318		\$648,839		\$4,047,157	40.0%
Contracted Services	\$2,400,505		\$1,421		\$2,401,926	23.8%
Commodities	\$1,186,250		\$41,050		\$1,227,300	12.2%
Capital Outlay	\$2,417,844		\$0		\$2,417,844	24.0%
	\$9,402,917	93.0%	\$691,310	7.0%	\$10,094,227	