2022-23 EXECUTIVE SUMMARY PUBLIC WORKS DEPARTMENT ANNUAL REPORT

Included in this summary are highlights for the 2023 fiscal year for eight of the ten divisions of the Public Works Department. Public Works Administration, General Infrastructure Maintenance, Equipment Services, Streets Water, Water Pollution Control, Storm and Sanitary Sewer Line Maintenance, and Solid Waste and Recycling divisions will be the highlights of this report. Engineering and Waverly Municipal Airport will be covered in a separate annual report.



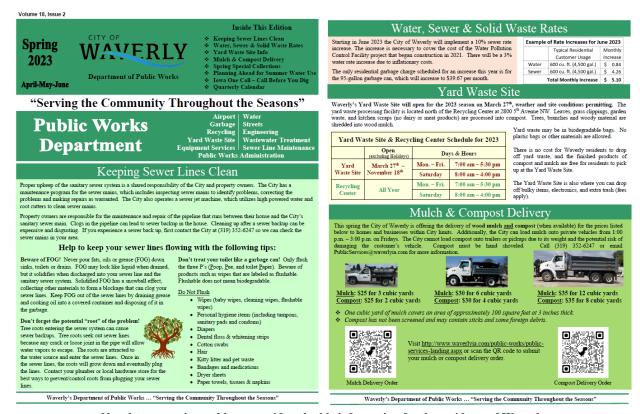
Pictured above: The Public Services facility is home to Public Works Administration, Streets, Solid Waste, Yard Waste Center, Recycling Center, Water, Sewer Line Maintenance, and Equipment Services.

Division 1 – Public Works Administration

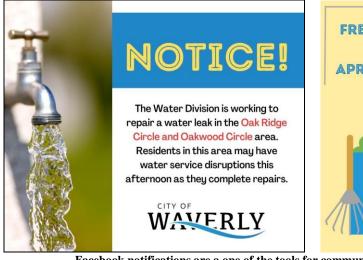
Public works administration handles the budgeting and business aspects of the Public Works divisions. Public works administration is also the coordination hub for the maintenance of city equipment, streets, alleys and parking lots, water, sewer, storm sewer, refuse, yard waste, and recycling.

This division receives many questions and requests by phone, email, website, and in person. Many of these contacts generate service requests for the different Public Works divisions. Some examples of service requests include temporary dumpster rentals, garbage cart exchanges, pothole reports, traffic signal concerns, hose bib meter rentals, mulch and compost deliveries, and spring and fall cleanup to mention a few. In 2023, public works administration generated over 1,900 service requests.

Communication is a top focus of this division. Newsletters, Facebook, local newspapers, and radio are all used to communicate planned and unplanned events such as water leaks, road closures, holiday schedules, and special events. Handouts focused on garbage and recycling services are provided to new residents as they sign up for their utilities. The Public Works section of the City's web page is not only informative but also a self-service tool for Waverly citizens.



Newsletters as pictured here provide valuable information for the residents of Waverly.





Facebook notifications are a one of the tools for communicating with the citizens of Waverly.

Division 2 – General Infrastructure Maintenance

The primary responsibility of the general infrastructure maintenance division is to finance and/or inspect the following infrastructure:

- Inspect and perform routine maintenance on the dam.
- Inspect trail bridges every four years.
- Finance the United States Geological Survey Cedar River Gage on Adams Parkway Bridge.
- Finance community-wide street lighting, entrance signs, and traffic signals.



Aerial photo of the dam.

Division 3 – Equipment Services

This division is responsible for the maintenance, repairs, and replacement of over 320 pieces of equipment for all City of Waverly departments including the Waverly Ambulance Department, Fire Department, and Waverly Utilities. A five-year equipment replacement schedule forecast is maintained allowing for the timely and economical replacement of vehicles and major items of equipment. There are two full-time employees in this division.

Looking to the Future:

- ➤ To improve the efficiency of the shop and decrease the downtime of vehicles being repaired.
- Look to lengthen vehicle maintenance schedules to match factory recommended service intervals to help combat the rising costs of supplies.
- Aid in the design and construction of the proposed fuel island, monitor tank levels, and watch fuel trends.

Division 4 - Streets

This division maintains approximately 70 miles of primary streets, 10 miles of gravel roads and alleys, and numerous municipal-owned parking lots. There are 7 miles of state roads through Waverly. The actual number of miles of city, county, and state roadways was last recalculated in September 2006. The street division has six full-time employees.

Maintenance efforts are focused on asphalt patching, seal coating, street sweeping, leaf vacuuming, sign maintenance, snow removal, aggregate shoulder and alley maintenance, painting pavement markings, intake repairs, and manhole adjustments.

Special events require coordination and support. The street division assists with numerous events each year including Heritage Days, Octoberfest, Wartburg Homecoming, and Christmas on Main.

Many times, Mother Nature dictates the assignments of the day. Thunderstorms, blizzards, tornados, high winds, and snow events often require quick response from the street division. Responding to weather events often requires work to begin for the street crew in the early hours of the morning.

Snow removal becomes the primary focus in the winter months. Priorities for snow removal have been established to enhance safety and efficiency during and following snow events. 651 tons of rock salt were purchased last year for treating snow and ice on city streets.

There were 255 service requests completed by the street division this year. A few examples of service requests are potholes, limbs down, street sign and signal issues, leaf vacuuming, alley repair, snow and ice issues, and assistance with special events.

Looking to the Future

- Intake reconstruction project to address failing infrastructure.
- Work to replace concrete approaches and sidewalks in residential alleys.
- > Replacement of traffic signal fixtures, LEDs, and other aging equipment.

Division 5 - Water

The water division continues to monitor water quality and perform routine maintenance on valves, and hydrants, and repairs water main leaks. This division employs four fulltime operators.

Waverly's water operators performed 1,022 lowa One-Call locates for water mains, sanitary sewers, and storm sewers. They also completed 217 service requests that addressed high water use, leak alerts, pooling water, sinkholes, and water pressure concerns.

On average 971,133 gallons of water per day were pumped with 75.1% of it accounted for through customer billing. A leak detection program has helped reduce the unaccounted water by identifying targeted repair work.

In the fall of 2022, Well #5 piping and PRV installation work was completed. These changes will allow for Well #5 to be utilized on both the high- and low-pressure zones as needed.

Looking to the Future

- ➤ Iowa Department of Natural Resources and United States Environmental Protection Agency regulation education on safe drinking water.
- > Continued consumer water leak notifications to reduce water waste.
- > Replacement of aged out fire hydrants.

Division 6 - Water Pollution Control

In November of 2022, the first wastewater was diverted into the new oxidation ditches. The nutrient reduction test results have been improving as more processes have been brought online. Although we were hopeful to see the completion of the Water Pollution Control Nutrient Reduction Improvements project in fiscal year 2023, the project will continue into fiscal year 2024. As you can see from the picture below, the plant is operating with many of the new treatment features.



Aerial photo of the new WPC Facility.

Four full-time operators are responsible for the operations of the water pollution control division.

Looking to the Future

- Complete water pollution control facility improvements
- Optimize the new oxidation ditch to run as efficiently as possible

Division 7 – Storm & Sanitary Sewer Line Maintenance

This division continued to primarily maintain, clean, and televise sanitary and storm sewer lines. Additional work included repair of sewer mains, water leak repairs, and drainage way cleaning. A concentrated effort to identify and reduce infiltration and inflow has been made on the east side of town in the Eastgate and Monaghan subdivisions.

There are two full-time operators in the storm and sanitary sewer line maintenance division.

Looking to the Future

- Update sanitary and storm sewer GIS (geographic information system) mapping as more discrepancies are found; including improving records of all sewer mains.
- Concentrate on repairing the damaged sewer lines in Eastgate and Monaghan subdivisions that were found during televising.
- Maintain a five-year sanitary sewer cleaning schedule.

Division 8 - Solid Waste & Recycling

Solid waste operations include daily residential and commercial refuse collection routes, bi-weekly curbside recycling routes, and a weekly Wednesday corrugated route. Seasonal collections include spring special collection weeks of yard waste and bulky items, fall leaf collection weeks, and holiday tree collection weeks. Other services include special pickup of bulky items and temporary dumpster rental service. There are six full-time refuse collectors, four part-time recycling center staff, and four seasonal vard waste staff in this division.

All solid waste is taken to the Black Hawk County Landfill. Their rate was \$42.25 per ton for 2022-23. Commingled recycling and cardboard collected on routes are transported to Republic Services in Cedar Falls.

Solid waste operators completed 1,430 service requests in fiscal year 2023. Some examples of service requests include cart and dumpster changes and repairs, temporary dumpster rentals, special pickups, mulch and compost deliveries, and yard waste collection.

The Yard Waste Site is the drop-off location for extra trash, bulky items, and old electronics for a fee. It is also the collection site for leaves, grass clippings, garden waste, trees and branches. Leaves, grass, and garden waste are processed into compost. Trees and branches are shredded into wood mulch. Compost and wood mulch are available for free at the Yard Waste Site or can be ordered for delivery for a fee. There were 57 compost deliveries and 73 wood mulch deliveries made this year.

The Recycling Center is a popular resource for the residents of Waverly. 35,584 vehicles visited the Recycling Center last year. Recyclable items accepted include glass, Styrofoam, used motor oil, office paper, magazines, newspapers, soft-covered books, plastic containers, and steel and tin cans. Used motor oil is recycled by Rite Environmental and is collected every other week. Styrofoam and glass are taken to the Cedar Falls Transfer Station. All other recycling material is sorted into gaylords and loaded onto a trailer that is provided and serviced by Republic Services of Cedar Falls.

Looking to the Future

- Always look for ways that can improve day-to-day operations.
- Continue to maintain a net-zero gain of compost and mulch at the end of the seasons at the yard waste site.

Division 9 – Engineering

Please refer to the separate Engineering Annual Report.

Division 10 – Waverly Municipal Airport

Please refer to the separate Airport Annual Report.

Conclusion

As a department, we continue to strive for excellence in community service and efficiency of operations. In the coming years, we hope to see infrastructure and operational recommendations implemented to better serve the citizens of Waverly, our customers, and to meet the needs of a growing community.

Respectfully Submitted,

Justin McGlaun Director Public Works

City of Waverly **Department of Public Works**FY 2022-23

ADMINISTRATION

Administration consists of the Director, the Specialist, and the Office Coordinator. The major functions related to Administration are the direction of present and future work programs, budget preparation and control, centralized record maintenance, inter/intra departmental coordination, billing and purchasing, and problem-solving relevant to personnel and public relations. All these areas relate to the ten Divisions of the Public Works Department (Administration, Engineering, General Infrastructure Maintenance, Equipment Services, Streets-RUT, Airport, Water, Water Pollution Control, Storm and Sanitary Sewer Line Maintenance, and Solid Waste and Recycling).

We utilize the City's website (www.waverlyia.com), newsletters, Facebook, newspaper articles and releases, radio announcements, and personal communication to inform the citizens of Waverly pertaining to the work performed by our department, when and where the work is to be accomplished, and the priorities with which work will be performed.

City of Waverly – Public Works Administration

Service Requests

FY 2022-23

SERVING THE CITY OF WAVERLY

The Public Services Center is the home of the following City divisions:

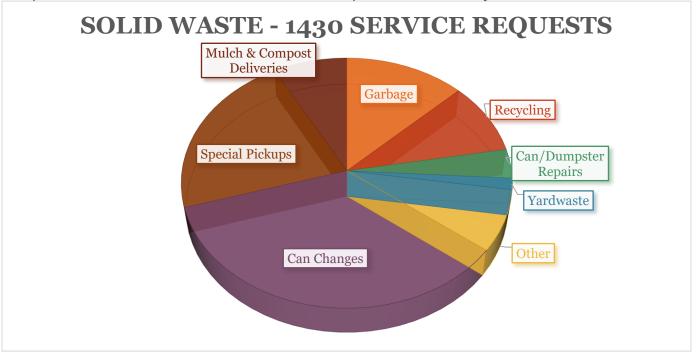
- Solid Waste (Garbage, Recycling & Yard Waste)
- Streets
- Water & Sewer Line Maintenance
- Equipment Services
- Public Works Administration

We receive many questions and requests by phone, email, website, and in person. Many of these contacts generate service requests for the different divisions. In the fiscal year 2023, the Public Services Center generated 1,902 service requests.

Serving the Community Throughout the Seasons

SOLID WASTE

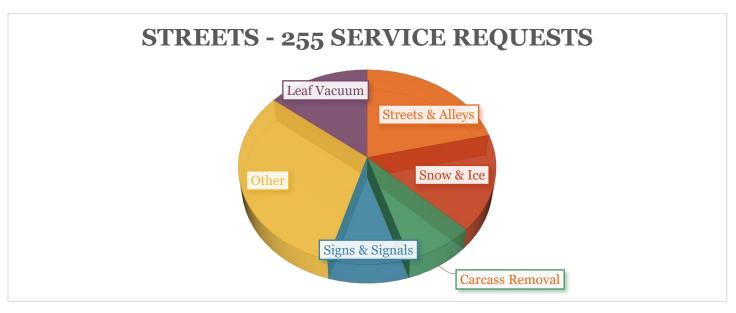
Common solid waste service requests include concerns about garbage and recycling services. They also include requests for can changes and repairs, special pickups of bulky items, and mulch and compost deliveries. There were 1,430 service requests in the fiscal year 2023.



The solid waste division also manages temporary dumpster rentals. Temporary dumpsters can be rented by citizens for up to 30 days. During the fiscal year 2023, there were 225 dumpster rentals.

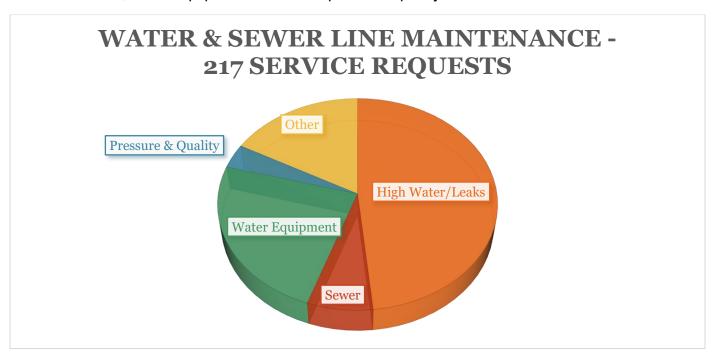
STREETS

Common street service requests include street & alley repairs, snow and ice removal, roadway carcass removal, and leaf vacuuming.



WATER & SEWER LINE MAINTENANCE

Common water & sewer line maintenance service requests include high water usage/leak concerns, sewer concerns, water equipment and water pressure/quality issues.



The water division also manages the hose bib rental program. There were 44 hose bib meter rentals in the fiscal year 2023.

EQUIPMENT SERVICES

Equipment services maintains and services city-owned vehicles and equipment. They also provide maintenance and service for Waverly Utilities vehicles as a billable service. During the fiscal year 2023, they completed 916 service jobs.

PUBLIC WORKS ADMINISTRATION

Public works administration handles the budgeting and business aspects of the Public Services Center. During the fiscal year 2023, 1063 check requests were generated to pay invoices, and 166 invoices were generated to collect for billable services.

City of Waverly **Department of Public Works**FY 2022-23

GENERAL INFRASTRUCTURE MAINTENANCE

A primary responsibility of the general infrastructure maintenance division is to finance and/or inspect the following infrastructure:

- Inspect and perform routine maintenance on the dam.
- Inspect trail bridges every four years.
- Finance the United States Geological Survey Cedar River Gage on Adams Parkway Bridge.
- Finance community-wide street lighting, entrance signs, and traffic signals.

Additionally, the local property tax support of the Waverly Municipal Airport is shown as an expense and transfer of monies to the Airport Fund.

City of Waverly **Department of Public Works**

FY 2022-23

EQUIPMENT SERVICES

The equipment services division is responsible for over 320 City vehicles and assets. Primary responsibilities of this division include equipment repair and maintenance, parts purchasing and stock, welding, fabrication, and work order reporting. This division employs two full-time mechanics. Bid specifications and bid documents for the purchasing of new equipment and vehicles and the sale of used equipment and vehicles are prepared in the equipment services division.

FUTURE PROJECTS:

- 1. Implement barcoding for parts inventory using the existing fleet management system.
- 2. To improve the efficiency of the shop and decrease the downtime of vehicles being repaired.
- 3. Look to lengthen vehicle maintenance schedules to match factory recommended service intervals to help combat the rising costs of supplies.
- 4. Aid in the design and construction of the proposed fuel island, monitor tank levels, and watch fuel trends.

AREAS OF CONCERN:

- 1. Cost and availability of equipment, vehicles, and parts that are required for City operations.
- 2. Training of new employees on operator maintenance and walk-around procedures.

City of Waverly - Public Works Equipment Services

Repairs and Fuel

FY 2022-23

Vehicle Repairs								
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
Service Jobs	597	386	561	727	853	916		
New Tires	101	102	115	130	103	144		
Tire Repairs	40	30	32	46	36	19		
Batteries	15	12	18	18	22	14		
Antifreeze (Gals)	35	26	20	25	44	13		
Oil Changes	148	117	102	193	196	224		
Oil (Gals)	504	638	667	699	852	723		
Total Parts (\$)	\$96,052	\$99,832	\$103,337	\$130,882	\$138,090	\$171,094		
Total Labor Charged	\$51,770	\$55,864	\$54,362	\$68,794	\$68,388	\$80,131		

Fuel Purchased								
Fiscal Year	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
Unleaded Fuel (Gals)	21,010	25,936	26,833	26,169	27,563	26,115		
Unleaded Fuel (\$)	\$59,116	\$66,793	\$63,161	\$64,755	\$100,305	\$95,036		
Diesel Fuel (Gals)	41,791	46,500	44,026	44,453	42,189	40,366		
Diesel Fuel (\$)	\$123,358	\$140,020	\$119,452	\$116,314	\$167,266	\$183,110		

City of Waverly - Public Works Equipment Services Vehicles & Equipment Purchased FY 2022-23

Department /	Vohiolo or Equipment		1		l		
Department / Division	Vehicle or Equipment Purchased & Make / Model	Did Doto	Law Diddor	Low Bid	Trade-In	Net Bid	Trada la
		Bid Date	Low Bidder	LOW DIG	Traue-III	ivet bid	Trade-In
Public Works /	2021 Case 621G Wheel	0/4/0000	Titan	# 400 000	# 40,000	Φ4 47 700	2007 Case 621D Wheel
Street-RUT	Loader (A115)	9/1/2022	Machinery	\$103,883	\$43,900	\$147,783	Loader
Public Works /	2023 Chevrolet 3500 Truck		Pat McGrath				
Street-RUT	(A108)	4/10/2023	Chevyland	\$72,623		\$72,623	
Public Works /			Allied				
WPC	Digester Mixing Pump	6/26/2023	Systems	\$33,533		\$33,533	
Public Works /	2023 Freightliner Side Load		Truck Country				
Solid Waste	Refuse (SW 105)	8/23/2023	of Iowa	\$188,106	\$45,000	\$233,106	2014 Freightliner
Public Works /	2023 Freightliner Rear Load		Elliott				
Solid Waste	Refuse w/ Packer (SW108)	3/16/2023	Equipment	\$149,232	\$82,500	\$231,732	2016 Freightliner
Leisure Services	2022 Kubota 3 Pt Disc		Deike				2007 MF Hay 3009
/ Veg Mgmt	Mower (VM102)	3/28/2022	Implement	\$15,420	\$2,750	\$12,770	(VM102A) Agco Allis
Leisure Services	2022 Ford Super Duty F450		Stivers Ford				
/ Veg Mgmt	Reg Cab Truck (VM110)	11/11/2022	Inc.	\$49,415		\$49,415	
Leisure Services	Aluminum Chipper Body w/		Don's Truck				
/ Veg Mgmt	accessories	4/19/2023	Sales Inc	\$31,750		\$31,750	
<u> </u>							
Leisure Services	2022 Ford F-150 Super Cab		Stivers Ford				
/ Cemetery	Truck (C755)	11/11/2022	Inc.	\$40,295		\$40,295	
	(2 - 2)		-	· -,		+ -,	
Leisure Services	2022 Chevy 2500 HD Truck		Bob Brown				
/ Golf Maint	(G601)	1/18/2023	Chevrolet	\$49,762		\$49,762	
,	(====)					- + 10,10	
Leisure Services			Miller True				2006 Toro 3280D Ground
/ Golf Maint	G621: 2022 Gravely Mower	8/4/2022	Value	\$13,000	\$4,500	\$8,500	Master Mower
, con mant	COL LOLL Gravery Wower	C, 1, 2022	Deike	ψ.ο,οοο	ψ 1,500	ψο,οοο	made move
Leisure Services	2022 Massey Fergusen MF		Implement				
/ Golf Maint	2860M (G639)	10/5/2022	Co.	\$27,250	\$9,350	\$36,600	1993 John Deere JD 1070
, Jon Mant	2000111 (0000)	10/0/2022	00.	Ψ21,200	ψ0,000	Ψ00,000	1000 301111 Decire 3D 1070
Leisure Services	2023 Toro Reelmaster		MTI				
/ Golf Maint	Fairway Mower (G604)	5/18/2023	Distributing	\$66,990	\$4,500	\$62,490	2010 Toro Fairway Mower
, con maint	: an way (1000+)	3/10/2023	Distributing	ψου,οοο	ψ,υυυ	Ψ02,π00	2010 Toto Fairway Mowel

City of Waverly - Public Works Equipment Services

Sale of Used City Vehicles & Equipment FY 2022-23

Division	Vehicles or Equipment Sold	Bid Date	Winning Bidder	Bid
Sewer Line Maintenance	Sreco-Flexible EMSP-6 Sewer Jetter Easement Machine (SS307A)	11/30/22	GOV DEALS	\$6,278
Sewer Line Maintenance	ARIES 2008 PATHFINDER MAINLINE CRAWLER CAMERA SYSTEM (SS319A)	11/11/22	GOV DEALS	\$7,493
WPC	Clow 12" Horizontal Swing Check Valve	11/30/22	GOV DEALS	\$101
WPC	Val-Matic 12" Check Valve Surgebuster Model 7212 with Backflow Actuator Assembly (1 of 2 Available)	11/30/22	GOV DEALS	\$101
WPC	Val-Matic 12" Check Valve Surgebuster Model 7212 with Backflow Actuator Assembly (2 of 2 Available)	11/30/22	GOV DEALS	\$101
Street	John Deere AT186432 4-in-1 - 92" Backhoe Bucket	05/23/23	GOV DEALS	915
Street	2010 Silverado 3500 4x4 Dump Truck (A108A)	05/23/23	GOV DEALS	15,036
Golf Course	2007 Ford F150 4x4 Extended Cab w/Lift Gate (G601A)	05/22/23	GOV DEALS	5,867
Cemetery	2001 Dodge Ram 1500 4x4 (C755A)	05/22/23	GOV DEALS	5,400

City of Waverly **Department of Public Works**

FY 2022-23

STREETS - RUT

The street division maintains approximately 70 miles of primary streets, 10 miles of gravel roads and alleys, and numerous municipal-owned parking lots. Primary operations include concrete repair, line painting, street sign maintenance and replacement, some traffic light maintenance, school zone beacons, street sweeping, shoulder repair, Intake repairs, manhole adjustments, and snow removal. In addition, annual seal coat projects are scheduled to extend the life and quality of streets.

CURRENT PROJECTS:

- 1. Continue to upgrade street signs to current standards.
- 2. Continue updating traffic signal hardware.

FUTURE PROJECTS:

- 1. Work to replace concrete approaches and sidewalks in residential alleys.
- 2. Continue to upgrade the City sign system to replace deteriorated signage and meet current regulatory standards.
- 3. Maintain a seven-district maintenance and repair schedule. Districts will have a concentrated effort for the year. Effort areas include fixing streets, signage, intakes, manholes, etc. The seven-district maintenance and repair schedule provides a coordinated path to continued maintenance and improvement.
- 4. Replacement of traffic signal fixtures, LEDs, and other aging equipment

AREAS OF CONCERN

- 1. 3rd Avenue NE reconstruction
- 2. 39th Street NE near the fairgrounds

City of Waverly - Public Works

Streets - RUT

Work Hours Per Core Services

FY 2022-23

Streets	Hours
Shoulder Work / Reconstruction	1,882
Road Grading	80
Alleys	125
Street Patching	1,193
Street Sweeping	907
Weed Mowing / Tree Trimming	164
Rock / Chips Hauling	251

Snow Removal	Hours
Sand Hauling	98
Snow Fence	173
Snow Plowing	536
Snow Removal	421
Sanding	223

Maintenance	Hours
Catch Basins	78
Bridges	2
Culverts	5
Manholes	40
Dry Run	9
Building Maintenance	488
Equipment Maintenance	917

Painting	Hours
Line Striping, Curbs, Crosswalks	941

Signs	Hours
Repair & Replace	253
New Installations	100

Special Projects	Hours
Airport	3
Yard Waste	98
Spring & Fall Clean-up	10
Mulch & Compost Deliveries	8
Water Dept	37
Solid Waste Dept	117
Sewer Maintenance	12
WPC Dept	4
Recycling Center	1
Cemetery Dept	7
Parks / Golf	96
Equip Services	0
Hospital	0
Meetings / Training	67

City of Waverly - Public Works Streets - RUT

Street Maintenance Materials

2022-23

MATERIAL COMPARISON REPORT							
Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23		
Asphalt Patch							
Tons	161	192	79	167	240		
Cost	\$18,300	\$22,464	\$8,753	\$19,782	\$33,907		
Road Rock							
Tons	994	1,147	373	702	534		
Cost	\$9,446	\$11,123	\$3,686	\$6,994	\$5,901		
3/8" Chips							
Tons	64	151	96	27	79		
Cost	\$795	\$1,502	\$1,258	\$359	\$1,182		
CRS-2 Oil							
Gallons	1,665	3,308	2,492	837	2,581		
Cost	\$3,163	\$5,956	\$4,486	\$2,092	\$6,708		
Paint (Yellow)							
Gallons	165	250	290	240	55		
Cost	\$2,345		\$4,353	\$4,401	\$996		
Paint (White)			_				
Gallons	595	125	350	295	265		
Cost	\$8,278		\$5,129	\$5,403	\$5,151		

SNOW REMOVAL MATERIAL COMPARISON							
Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23		
Rock Salt							
Tons	852	729	805	959	651		
Cost	\$69,367	\$64,195	\$61,582	\$83,689	\$65,242		
Ice Sand							
Tons	8	120	7	14	101		
Cost	\$188	\$1,082	\$175	\$350	\$1,188		

City of Waverly **Department of Public Works**

FY 2022-23

WATER

The water division is responsible for the operation and maintenance of the entire water system including wells, towers, piping, pumps, controls, hydrants, and other equipment within the City of Waverly. This division performs or provides programs as follows: replacement of older system valves and hydrants, valve box raising and replacement, valve turning, hydrant flushing and flow testing, water main repair, water main testing and installation, water quality testing, answers customer complaints on taste, smell, usage, or questions regarding water quality as per articles that appear in the newspapers.

Water is supplied by the water division to Waverly residents and industry utilizing four wells, three towers, and approximately 76 miles of water main. This includes 744 fire hydrants, 1469 water main valves, over 562 hydrant valves, and 4,391 meters. The system's pumping capacity is approximately 5,300 gallons per minute and its total storage capacity is 1,750,000 gallons elevated. On average, there were 971,333 gallons per day pumped this year.

During FY2022-23, the water division continued to locate and correct water leaks. Our billing to pumpage accountability has been calculated at 75.1%.

FUTURE PROJECTS

- 1. Long range plans to eliminate dead end water mains to various areas of the City and improve fire flow areas of town that are below standard.
- 2. Develop a lead service line inventory and work on programs to encourage the elimination of lead service lines.
- 3. Maintain a seven-district maintenance and repair schedule. A concentrated effort to fix hydrants, valves, paint hydrants, etc. will occur in one district each year.
- Complete all testing required by United States Environmental Protection Agency and lowa Department of Natural Resources. Maintain the highest quality water possible throughout our distribution system. Increased testing for forever chemicals such as PFAS and PFOS.
- 5. Continue the program for operation and replacement of water distribution system valve and hydrants. Raising valve boxes, and installing valves and hydrants will continue annually. This program provides improved fire protection and enables the Water Division to isolate smaller areas of the city during water system repairs.

City of Waverly - Public Works Water

Core Services

FY 2022-23

Water Meters	Totals
New Meter Installations	54
Meters Replaced	44
Seasonal In	35
Seasonal Out	47
ERTs	61
Meters Tested & Repaired	27
Hyd. Meters / Hose Bib Meter	61

Water Service Lines	Totals
Capped Services	0
Service Line Taps	1
Sound Detection	5

Water Mains	Totals
Repaired	23
Replaced	2
Sound Detection	1

Water Valves	Totals
Valves Operated	91
Valves Installed	10
Valves Repaired	5
Valves Replaced	11

Water Valve Boxes	Totals
Boxes Repaired	8
Boxes Installed	7
Boxes Cleaned	13
Boxes Raised	0
Boxes Lowered	0

Hydrants	Totals
Flushed	97
Repaired	2
Replaced	2
Installed	1
Painted	18
Flagged	0

Water Towers	Visits
Interior	145
Exterior	18
Exterior Maintenance (hours)	0

Wells	Visits
Interior	1,288
Exterior	184
Exterior Maintenance (hours)	0

Other Projects	Total
Contractors	32
Other City Departments	206

Number of Locates	Totals	
Iowa One Call Tickets	1,022	
Structures Located from	995	
IOC Tickets		
Responses Entered	359	

Number of Samples Taken	Totals
Bacteria	154
Chlorine	1,763
Fluoride	1,593
Nitrate	136

City of Waverly - Public Works Water

Gallons Pumped FY 2022-23

Gallons Pumped Versus Gallons Billed				
Fiscal Year	Gallons Pumped	Estimated Unmetered Gallons*	Gallons Billed	Percent Accountable
2022-23	354,682,000	7,777,000	258,762,000	75%
2021-22	338,991,000	11,030,000	266,292,000	81%
2020-21	384,774,000	16,065,000	268,223,000	74%
2019-20	349,624,000	9,521,000	250,099,000	74%
2018-19	341,884,000	13,058,000	243,332,000	75%
2017-18	358,615,000	19,588,000	250,852,000	75%

^{*} Estimated Unmetered Gallons are for hydrant flushing, watermain flushing, sewer jet machine, street sweeper, Fire Department, water leaks, etc.

Water Consumption										
City Consumption Gallons	5,477,687									
Highest Pumping Day	1,770,000									
Lowest Pumping Day	493,000									
Average Pumping Day	971,333									
Total Gallons Pumped	354,682,000									

City of Waverly **Department of Public Works**

FY 2022-23

WATER POLLUTION CONTROL

The water pollution control division operates and maintains the wastewater treatment facilities for the City. These facilities include the treatment plant, main lift station, and nine smaller lift stations. The testing and monitoring of industrial discharges, as well as the disposal of biosolids, are also the responsibilities of the WPC division. Efficient operation and maintenance of these facilities are required by permits regulated through State and Federal agencies (Department of Natural Resources and Environmental Protection Agency). The daily average treatment of wastewater for fiscal year 2022-23 was 1,198,000 gallons. This year, 17,510,000 gallons of this treated water were provided to the Waverly Municipal Golf Course for outdoor use.

This completes a brief overview of the water pollution control facility's activity within the past fiscal year. While the overview highlights the major events, it does not represent the knowledge and expertise needed to operate and maintain an efficient facility. The ability to recycle the precious resource of water is one that is often overlooked but is crucial for humanity.

CURRENT PROJECT

1. Upgrade of WPC Plant to Activated Sludge Process (from Trickling Filter/RBC Process), for Nutrient Reduction

FUTURE PROJECTS

- 1. Eastgate Lift Station
- 2. SCADA (Supervisory Control and Data Acquisition) communication at smaller lift stations

PROBLEM AREAS OR AREAS OF CONCERN

- 1. Shortage of qualified and accessible land for biosolids application
- 2. Insufficient biosolids storage capacity due to increased production with Oxidation Ditch

City of Waverly **Department of Public Works**

FY 2022-23

STORM AND SANITARY SEWER LINE MAINTENANCE

The storm and sanitary sewer maintenance division's main function is to maintain and clean the sewer system. They also assist the street, waste pollution center, and water divisions as needed with major projects. By maintaining a five-year cleaning schedule, we can minimize sewer-related back-ups by catching and fixing issues before they become a major concern.

The following is a brief overview of some projects during FY 2022-23. This is not a total summary but gives an idea of this division's versatility and the expertise required. Of our 336,770 feet of sanitary sewer mains, nearly 71,000 feet were cleaned and 7,200 feet were televised. Several problem areas are being scheduled for repair or replacement as time and funds become available.

FUTURE PROJECTS

- 1. Update sanitary and storm sewer GIS (geographic information system) mapping as more discrepancies are found, including cleaning records of all sewer mains.
- 2. Continue work on storm sewer intakes and catch basins and replace old brick structures with poured concrete structures.
- 3. Concentrate on repairing the damaged sewer lines in Eastgate and Monaghan subdivisions that were found during televising.
- 4. Maintain a five-year sanitary sewer cleaning schedule.

AREA OF CONCERN

- 1. Infiltration and inflow problems must continue to be addressed with some major financing.
- 2. Tree roots in sanitary sewer lines.
- 3. Undersized/aged storm sewer pipes on 3rd Avenue SW, 2nd Avenue SW, and other outfalls to the river.
- 4. Eastgate and Monaghan subdivision sewer mains

City of Waverly - Public Works Storm and Sanitary Sewer Line Maintenance Core Duties Comparison 2022-23

Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23	Units
Sanitary Sewer Maintenance						
Lines Cleaned	29,698	86,403	62,823	75,113	70,844	Feet
Manholes Cleaned	5	34	51	. 8	16	Each
Storm Sewer Maintenance						
Lines Cleaned	5,287	6,632	1,316	400	2,632	Feet
Intakes & MH Cleaned	57	29	26	31	38	Each
<u>Televising Lines</u>						
Sanitary Sewer	3,450	4,169	5,221	2,308	7,201	Feet
Storm Sewer	360	2,231	1,175	419	280	Feet
Jetting Sewer Mains						
Water Used	95,925	189,750	133,510	164,580	193,700	Gallons
Lines Repaired						
Sanitary Sewer	1	5	6	0	0	Each
Storm Sewer	3	8	7	2	2	Each
Intakes Repaired	2	0	0	2	0	Each
Manholes Repaired	0	0	1	0	2	Each
Sewer Call-Outs						
During & after hours	12	18	14	9	9	Each
Other Division Work						
Streets - Snow Plowing	18.2	20	0	6.2	10	Hours
Water - Leak Repairs	200.6	180	165	74.7	54.9	Hours
WPC - Lift Stations	19	4	16	1	8	Hours
Leisure Serv Cem. Graves	40	27	12	24	21	Each
Leisure Serv Golf Course	0	3	0	0	0	Hours
Engineering - Inspections	0	1	1	12	6	Hours

Cleaned out waterways, detention areas & Dry Run. Cleaned drains for Water Dept., Law Center, bike trail bathrooms, hospital pits & drains and pumped Airport septic. Root-treated in problem sewer mains.

City of Waverly **Department of Public Works**FY 2022-23

SOLID WASTE

The solid waste division services 4,422 garbage carts, 2,440 recycling carts, and 212 commercial garbage and corrugated dumpsters throughout the City of Waverly. There are five weekly residential routes for garbage collection, one for each day of the week. There are five bi-weekly routes for recycling collection, one for each day of the week. Commercial routes consist of six different routes, one for each day of the week for refuse collection and a sixth route for cardboard collection. Refuse collected within the City of Waverly is required to be in a city-issued garbage cart or dumpster. Residential customers can rent a 35-, 65- or 95-gallon City-issued garbage cart. Commercial customers can rent either a City dumpster or a city-issued garbage cart. Recycling carts and cardboard dumpsters are optional.

The Recycling Center is part of the solid waste division. The Recycling Center is open Monday through Friday from 7:00 a.m. to 5:30 p.m. and from 8:00 a.m. to 4:00 p.m. on Saturdays. The Recycling Center has a staff of four part-time employees. They serve an average number of 118 patrons each day.

The Yard Waste Site is also part of the solid waste division. The Yard Waste Site opens in late March and closes in late November each year. The hours of operation are Monday through Friday 7:00 a.m. to 5:30 p.m. and Saturday 8:00 a.m. to 4:00 p.m. Four part-time seasonal employees operate the Yard Waste Site. Leaves, grass clippings, garden waste, trees, and branches are accepted here at no charge. Extra trash and bulky items such as appliances, furniture, tires, and carpeting can be dropped off here for a fee. October of 2022 was the busiest month this fiscal year with 2,968 vehicles entering the site.

City of Waverly - Public Works Solid Waste Division

Employee Core Services

FY 2022-23

Refuse Collections	Hours
Residential	1,776
Commercial	2,264
Black Hawk Co. Landfill	998
Temporary Dumpsters	389
Corrugated Collection	569
Special Pickups	68
Curbside Recycling Pick-up	771
Recycle Center Duties	102
Container Exchanges	150
Building/Vehicle Maintenance	550
Dumpster Repairs	570
Republic, City Cedar Falls	315
Misc. Activity Including Training	233
Yard Waste Site	209

Other Divisions	Hours
Street Division	
Snow Plowing & Removal	196
Other (Patching, Mowing, Tree Trimming, Etc)	103
Water Division Projects	0
Sewer Maintenance Projects	0
Other Departments	2

City of Waverly Solid Waste Landfill Disposal Quantities 2022-23

		2018-19	2019-20	2020-21	2021-22	2022-23
		Tons	Tons	Tons	Tons	Tons
	Residential	164.02	179.52	183.05	173.05	167.28
July	Commercial	234.22	251.84	228.91	222.94	217.97
	Total	398.2	431.4	412.0	396.0	385.3
	Residential	173.3	174.43	181.94	191.26	191.58
August	Commercial	257.79	237.82	210.23	267.1	249.39
	Total	431.1	412.3	392.2	458.4	441.0
	Residential	148.84	155.87	164.78	170.83	175.34
September	Commercial	234.61	255.85	250.08	247.42	223.12
	Total	383.5	411.7	414.9	418.3	398.5
	Residential	156.12	161.24	165.54	160.62	160.05
October	Commercial	266.49	263.37	236.28	236.66	228.86
	Total	422.6	424.6	401.8	397.3	388.9
	Residential	165.1	149.74	162.73	172.45	172.5
November	Commercial	222.06	217.33	197.49	230.84	215.19
	Total	387.2	367.1	360.2	403.3	387.7
	Residential	146.1	167.39	174.92	152.79	161.88
December	Commercial	209.3	218.99	201.74	214.36	198.81
	Total	355.4	386.4	376.7	367.2	360.7
	Residential	138.16	152.4	151.99	166.06	154.07
January	Commercial	188.87	225.98	183.39	211.3	204.67
	Total	327.0	378.4	335.4	377.4	358.7
	Residential	144	120.98	137.68	141.14	146.45
February	Commercial	195.31	198.78	181.67	210.4	190.59
	Total	339.3	319.8	319.4	351.5	337.0
	Residential	138.02	136.48	163.92	155.36	153.42
March	Commercial	223.63	224.76	253.53	242.91	219.47
	Total	361.7	361.2	417.5	398.3	372.9
	Residential	158.3	174.37	168.61	163.33	156.99
April	Commercial	258.12	187.07	233.48	227.19	215.39
	Total	416.4	361.4	402.1	390.5	372.4
	Residential	173.41	173.44	155.09	164.99	182.17
May	Commercial	266.61	212.69	251.99	289.28	259.91
	Total	440.0	386.1	407.1	454.3	442.1
	Residential	152.17	172.82	162.4	183.36	173.93
June	Commercial	220.18	250.05	261.38	243.28	227.99
	Total	372.4	422.9	423.8	426.6	401.9
TOTAL ANI	NUAL TONS	4,634.7	4,663.2	4,662.8	4,838.9	4,647.0

City of Waverly Solid Waste and Recycling Revenues FY 2022-23

			Solid Waste			Red	Total				
	Utility	Sticker	Bulky Items	Temp.	Total				Recycled	Total	Solid Waste
	Billing	Sales	dump vol &	Dumpsters	Solid Waste	Paper	Steel &	Metro	Bulky	Recyclable	& Recycling
Date	670-840-4500	670-840-4552	extra volume	trips/delivery	Revenue	Products	Aluminum	Redemption	Items	Revenue	Revenue
Jul-22	\$ 150,649.04	\$ -	\$ 2,858.50	\$ 795.00	\$ 154,302.54		\$ 399.60	\$ 478.90	\$ 1,231.00	\$ 2,109.50	\$ 156,412.04
Aug-22	142,646.83	4,902.50	2,279.50	300.00	150,128.83	1,414.50	334.26	299.65	1,050.00	3,098.41	153,227.24
Sep-22	143,653.78	1,470.00	1,312.50	250.00	146,686.28	124.45		388.90	802.00	1,315.35	148,001.63
Oct-22	144,317.42	2,465.00	1,571.00	350.00	148,703.42		515.60	165.60	621.00	1,302.20	150,005.62
Nov-22	151,013.80	0.00	1,361.00		152,374.80				689.00	689.00	153,063.80
Dec-22	140,707.99	1,480.00	942.00		143,129.99		388.50	377.15	628.50	1,394.15	144,524.14
Jan-23	149,191.21	1,650.00	281.50	75.00	151,197.71			428.55	473.00	901.55	152,099.26
Feb-23	142,821.23	17.50	1,309.60	77.25	144,225.58			345.00	186.00	531.00	144,756.58
Mar-23	155,193.87	1,245.00	654.00	200.00	157,292.87		369.20	87.20	896.00	1,352.40	158,645.27
Apr-23	146,260.37	1,737.50	1,002.50	250.00	149,250.37		275.20	382.55	1,402.00	2,059.75	151,310.12
May-23	155,281.78	5,645.00	1,844.00	920.00	163,690.78		258.75	475.95	1,546.00	2,280.70	165,971.48
Jun-23	156,673.82	5,390.00	1,204.50	30.00	163,298.32		272.55		967.00	1,239.55	164,537.87
TOTALS	\$ 1,778,411.14	\$ 26,002.50	\$ 16,620.60	\$ 3,247.25	\$ 1,824,281.49	\$ 1,538.95	\$ 2,813.66	\$ 3,429.45	\$ 10,491.50	\$ 18,273.56	\$ 1,842,555.05
				Received	from Black Hawk Co	ounty Landfill to	assist with fund	ding of recycling	g & waste reduc	ction (9/8/2022)	\$ 3,869.63
									TOTA	AL REVENUES	\$ 1,846,424.68

City of Waverly – Public Works Solid Waste Division **Recycling and Yard Waste Statistics** FY 2022-23

RECYCLING									
Recycling Center	Cars Counted								
Annual	35,584								
Saturdays	7,484								
Daily Average	118								
Monthly Average	2,965								
Curbside Recycling Route	Stops Made								
Annual	53,699								
Monthly Average	4,475								
Recycled Material	Annual Amounts								
All Recycled Materials	912 tons								
Recycling Center Only	604 tons								
Curbside Collection Only	309 tons								
Steel and Iron	24 tons								
Appliances	555								
Used Oil	2,385 gallons								
Electronics	20,768 lbs.								
Revenue	\$18,273.56								

YARD WASTE									
Yard Waste Site	Cars Counted								
Annual (8 months)	17,056								
Monthly Average	2,132								
Busiest Month – October 2022	2,968								
2 nd Busiest Month – May 2023	2,481								
Compost and Mulch	Annual Amounts								
Compost Loads Delivered	57								
Compost Cubic Yards Delivered	356								
Mulch Loads Delivered	73								
Mulch Cubic Yards Delivered	723								

City of Waverly **Vehicle Count**

Recycling Center and Yard Waste Site

FY 2022-23

	Recycling Center													
		Wee	kdays	Satu	urdays									
		Vehicle		Vehicle		Monthly	Daily							
Month	# of Days	Count	% of Total	Count	% of Total	Total	Average							
Jul-22	25	2515	78%	701	22%	3,216	129							
Aug-22	27	2653	82%	579	18%	3,232	120							
Sep-22	25	2314	80%	575	20%	2,889	116							
Oct-22	25	2312	75%	779	25%	3,091	124							
Nov-22	24	2115	79%	564	21%	2,679	112							
Dec-22	24	2,545	83%	528	17%	3,073	128							
Jan-23	25	2,172	80%	530	20%	2,702	108							
Feb-23	24	1,825	75%	616	25%	2,441	102							
Mar-23	27	2,315	82%	499	18%	2,814	104							
Apr-23	24	2,210	70%	943	30%	3,153	131							
May-23	26	2,513	81%	586	19%	3,099	119							
Jun-23	26	2,611	82%	584	18%	3,195	123							
					Total	35,584	118							

Recycling Center - Vehicle Count History												
Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23							
Weekdays	32,839	44,718	31,840	29,137	28,100							
Saturdays	10,241	8,345	9,227	7,798	7,484							
Totals	43,080	53,063	41,067	36,935	35,584							

Yard Waste Site - Vehicle Count History												
Fiscal Year	2018-19	2019-20	2020-21	2021-22	2022-23							
Totals	22,123	22,896	21,156	18,258	17,056							

City of Waverly - Public Works Solid Waste Division Yard Waste Site - Bulky Items Collection

FY 2022-23

			20	22						202	3			
Bulky Item	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Special Collection Week	May	June	Total
Appliances w/Freon		J	·			*Yard	Waste	Site Ci	losed			,		
Refrigerators	11	4	4	3	10	0	3	3	1	18	6	7	3	73
Freezers	3	1	1	2	0	0	1	1	0	4	2	4	4	23
Air Conditioners	3	1	1	1	3	0	0	0	0	1	0	0	1	11
Dehumidifiers	12	5	2	3	2	1	0	0	4	13	6	11	6	65
Appliances w/out Freon														
Water Heater/Furnace	4	2	2	0	1	0	5	1	4	8	1	6	3	37
Water Softener	1	1	3	3	3	0	0	0	3	8	3	1	4	30
Stove	1	1	1	3	3	0	0	1	1	7	4	1	1	24
Washer	4	1	11	2	3	3	0	0	4	12	5	6	2	53
Dryer	5	1	5	3	1	4	2	0	5	18	9	4	0	57
Dishwasher	0	2	3	0	3	1	3	0	2	7	2	3	4	30
Humidifier	0	1	0	0	0	0	1	0	0	0	5	0	0	7
Gas Grill	4	2	3	5	1	0	0	0	2	14	10	3	1	45
Microwave	9	10	3	4	4	0	3	2	4	29	16	9	7	100
<u>Electronics</u>														
Televisions	34	16	12	15	30	4	10	3	29	60	15	30	21	279
Monitors	3	0	1	2	2	1	0	1	3	9	1	3	2	28
Printers	2	7	1	2	4	0	0	1	3	8	3	4	4	39
Computers	0	6	0	0	4	1	1	1	0	3	2	1	2	21
<u>Tires</u>														
Car	1	0	0	0	0	0	0	0	0	23	4	11	2	41
Truck	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Tractor	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	98	61	53	48	74	15	29	14	65	242	94	104	67	964

^{*}Bulky Items are collected at the Public Services site during when the Yard Waste Site is closed.

City of Waverly Recycling Quantities 2022-23

Sorted Recycling Collected at Recycling Center														
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Paper, Bond	lbs.		7,120			5,220			7,460		5,500		6,040	31,340
Slick Paper / Magazines	lbs.		7,700			8,250			11,400		10,360		14,460	52,170
Newsprint	lbs.		8,560			4,460			8,580		4,040		6,020	31,660
Corrugation/Chipboard	lbs.	66,180	89,800	70,540	63,180	89,380	72,020	74,460	60,500	87,580	67,740	87,120	74,420	902,920
#3, 4, 5, 6, 7 Plastics	lbs.	3,680	7,680	340	7,120	3,580	4,860	6,720	3,340	6,900	3,520	3,500	8,240	59,480
Steel / Alum	lbs.			25,780			11,100		5,680			4,740		47,300
Books	lbs.		2,760			2,740			2,220		3,220			16,460
Styrofoam**	lbs.	560	520	440	560	420	420	460		760	520	860	600	6,120
Clear Glass*	lbs.	4,980	4,660	4,000	4,680	4,680	4,560	4,660	4,700	10,080	9,440	4440	4,480	65,360
Total Sorted Recycling	lbs.	75,400	128,800	101,100	75,540	118,730	92,960	86,300	103,880	105,320	104,340	100,660	114,260	1,207,290
													Total Tons	604

^{*}City takes glass to City of Cedar Falls and they recycle at no cost to us. (Effective Jan. 1, 2021 - \$50 per load)

Note: Changed sorted recycling service provider. 1/18/22 ended with Quincy and began with Republic Services

	Commingled Recycling Picked up Curbside (Republic)														
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL	
Total Commingled Recycling	lbs.	48,120	56,400	49,580	48,880	61,340	61,900	51,140	44,900	40,060	43,540	46,200	65,340	617,400	
													Total Tons	309	

Aluminum, Cardboard, Slick Paper, Newspapers, Bond Paper, Plastics & Metal Cans

*Note: Changed commingled recycling service provider (counsel signed Resolution 5/16/22) from Jendro to Republic

TOTAL RECYCLING														
														TOTAL
		July	Aug	Sept	OCI	INOV	Dec	Jan	reb	iviaitii	Арш	iviay	Julie	IOIAL
TOTALS - Sorted &	lbs.	123,520	185.200	150,680	124,420	180,070	154,860	137,440	148.780	145,380	147,880	146.860	179,600	1,824,690
Commingled Recycling	103.	123,320	103,200	130,000	124,420	100,070	134,000	137,440	140,700	145,500	147,000	140,000	179,000	1,024,090
													Total Tons	912

	Motor Oil Collected at Recycling Center														
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL	
Motor Oil	gal.	250	100	125		460	75	175	400	75	150	475	100	2,385	
														0.005	

Total Gallons 2,385

Electronics														
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Electronics	Ibs			6899			7415					6454		20,768
													Total Tons	10

^{**}City takes styrofoam to City of Cedar Falls (Effective Jan. 1, 2021 - \$50 per load)