

DEPARTMENT OF PUBLIC WORKS

STREET DIVISION

The Street Division involves many diverse areas. These areas will be summarized individually to overview the annual events. The Street Division maintains approximately 75+ miles/ 1,162 blocks of primary streets, 10 miles of gravel roads and alleys, and numerous municipal-owned parking lots.

Street Maintenance and Reconstruction

- Seal Coat Program
- Pothole Repair
- Crack Sealing

Snow Removal

Painting

- Line Striping
- Curb Painting
- School Crossing Signs
- Dry Run Walk Bridges

Special Collection Week (Furniture, Appliances, Tires, Yard Waste, & Brush)

Fall Leaf Pickup

Ditch Cleaning

Mowing

Street Sweeping

Road Grading

Alley Maintenance

Street Signs

- Maintenance
- Replacement

Emergency Response

- Flash Flooding
- Storm Damage Cleanup
- Other Manpower Needs

Parking Lot Maintenance

City of Waverly

Street Department Annual Report

Year of : 2013-2014

<u>Streets</u>	<u>Hrs</u>	<u>Painting</u>	<u>Hrs</u>
Reconstruction	<u>222</u>	Line Striping	<u>132</u>
Road Grading	<u>62</u>	Curbs & X-Walks	<u>264</u>
Alleys	<u>76</u>		
Cold Mix Patching / Durapatching	<u>1,689</u>	<u>Snow Removal</u>	
Street Sweeping	<u>1,072</u>	Sand Hauling	<u>190</u>
Weed Mowing /		Snow Fence	<u>74</u>
Tree Trimming	<u>845</u>	Snow Plowing	<u>899</u>
Rock / Chips Hauling	<u>83</u>	Snow Removal	<u>385</u>
		Sanding	<u>124</u>
<u>Maintenance</u>		<u>Signs</u>	
Catch Basins	<u>137</u>	Repair &/or Replace	<u>110</u>
Bridges	<u>15</u>	New Installations	<u>60</u>
Culverts			
Dry Run	<u>1</u>	<u>Special Projects</u>	
Building Maintenance	<u>49</u>	Airport	<u>3</u>
Equipment Maintenance	<u>675</u>	Yard Waste	<u>164</u>
		Spring Clean-up	<u>44</u>
		Fall & Winter Clean-up	<u>77</u>
		Water Dept	<u>6</u>
		Solid Waste Dept	<u>705</u>
		Sewer Maintenance	<u>2</u>
		WPC Dept	
		Recycling Center	<u>67</u>
		Cemetery Dept	<u>4</u>
		Golf Course Dept	
		Equip Services	<u>25</u>
		Parks Dept	<u>8</u>
		Meetings / Training	<u>118</u>

MATERIAL COMPARISON REPORT

Fiscal Year	2009-10	2010-11	2011-12	2012-13	2013-14
Asphalt Patch					
Tons	404	278	406	154	80
Cost (\$)	32,704	24,428	36,035	14,787	8,542
Road Rock					
Tons	2,212	1,616	1,134	489	312
Cost (\$)	17,311	13,328	9,579	4,131	2,678
3/8" Chips					
Tons			315	307	540
Cost (\$)			3,481	3,388	6,054
CRS-2 Oil					
Gallons			5,282	9,848	10,978
Cost (\$)			10,300	19,204	21,407

STREET MAINTENANCE (BLOCKS)

Fiscal Year	2009-10	2010-11	2011-12	2012-13	2013-14
Single Seal Coat (City)	0	0	0	0	0
Single Seal Coat (Bid)	97	76	125	97	94
Double Seal Coat	0	8	0	0	2

STREET RECONSTRUCTION

	Linear Feet	Miles
2009-10		
5th Street NW (reconstruction)	1,701	0.32
5th Avenue NW (curb reveal & overlay)	3,413	0.65
2010-11		
2nd Avenue SW	2,028	0.38
2011-12		
12th Street NW (resurfacing)	3,538	0.67
2012-13		
16th Street SW	1,626	0.31
2013-14		
4th St NW (and 1st Ave to 4th Ave between 4th and 5th Streets NW)	3,013	0.57

SNOW REMOVAL MATERIAL COMPARISON

Fiscal Year	2009-10	2010-11	2011-12	2012-13	2013-14
Rock Salt					
Tons	877	687	729	509	986
Cost (\$)	60,185	48,500	51,442	36,915	70,476
Ice Sand					
Tons	232	76	21	17	42
Cost (\$)	2,900	609	52	133	328

DEPARTMENT OF PUBLIC WORKS

SOLID WASTE / RECYCLE DIVISION

Recycling

Voluntary Drop-Off Program
Curbside Collection Program

Refuse Collection

Residential
Commercial
Yard Waste – Drop-Off Site

Refuse Container (Dumpster)

Repair

Special Collections

Waverly Horse Sale – Fall & Spring
Chamber – Agriculture Appreciation Day
Bremer County Fair
Waverly Cleanup Days – Spring
Other Special Events

The Solid Waste Division collects refuse once a week from residential customers and up to five days per week from commercial. Garbage to be pickup in the City of Waverly needs to be in a City-owned garbage container or dumpster. Residential customers are able to rent a 35- or 65-gallon City-owned garbage container. Commercial customers can use either a City dumpster or a city-owned garbage container. Curbside recycling continues to be the first and third week of each month. The average stops per day is 127. It is a one-man operation, which one refuse collector runs each month. Consideration needs to be given to weekly curbside recycling.

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. Local civil volunteer groups, when available, continue to work during Recycling Saturdays as a community service.

Two part-time employees operate the Recycling Center each day, each working half a day, including each Saturday. There are a total of four part-time employees who work in the center. The average number of cars through the center each day is 120.

Yard Waste Site

Along with the Recycling Center, the City also operates a Yard Waste Site from April through November. Four part-time employees also operate the Yard Waste Site. Leaves, grass clippings, garden waste, trees, and branches are accepted at no charge. Appliances, furniture, tires, and carpeting are also collected here for a fee while it is open.

City of Waverly
2013/2014

Recycling Statistics

Recycling Center Car Count

Total: 33,559

Daily Average: 120

Recycling Saturday Car Count

Total: 8,110

Monthly Average: 676

Curbside Recycling Stops

Total: 15,427

Monthly Average: 1,270

Total Weight of the Recycled Products from the Recycling Center & Curbside Recycling Route: 1,838,608 pounds (920 tons)

Total Weight of the Recycled Products from the Curbside Recycling Route: 76,710 pounds (39 tons May/June 2014)

Revenue from the recycled products plus used oil: \$17,398.79

Estimated cost for recycling program:

1. \$55,000 in wages for part-time employees at the Recycling Center and the Yard Waste Site, full-time employees doing the curbside route and hauling product to City Carton (north of Cedar Falls)
2. \$15,000 to \$20,000 in utilities, building maintenance, equipment, fuel, and contracted work.

Other items or material recycled by the City of Waverly:

- 5-10 tons of steel, old sewer castings, signs, poles, plow blades, and miscellaneous pieces
- 99 tires
- 397 appliances
- 1,700 gallons of oil
- 348 E-waste computers, televisions, phones, monitors, and printers

Yard Waste Site car count:

(July - Nov 2013 and April - June 2014): 21,663

Monthly average: 2,708

Busiest months were Oct '13 and May '14

740 tons of yard waste was turned into compost.

3,955 tons of brush and trees were ground up to make wood mulch.

11 to 31 million gallons of treated wastewater that is disinfected for use on the Municipal Golf Course for irrigation.

827,344 gallons of biosolids injected into the soil; helps reduce the amount of product farmers have to use on their crop land.

CITY OF WAVERLY
SOLID WASTE ANNUAL REPORT

Year of: 2013-14

Refuse Collections

	Hrs.
Residential	3,508
Commercial	4,132
Temporary Dumpsters	473
Corrugated Collection	632
Curb-Side Recycling Pick-up	686
Recycle Center Duties	420
Vehicle Maintenance	207
Misc Activity (training, etc)	174

Container Repairs

84

Street Dept

Snow Plowing & Removal	372
Other (Patching, Mowing, Tree Trimming, Etc)	383

Water Dept Projects

14

Sewer Maintenance Projects

64

RECYLING CENTER - CAR COUNTS

Fiscal Year	'09-'10	'10-'11	'11-'12	'12-'13	'13-'14
Weekdays	26,969	25,316	22,662	21,044	25,449
Recycling Sat.	4,803	5,676	6,123	7,171	8,110
Totals:	31,772	30,992	28,785	28,215	33,559

YARD WASTE SITE - CAR COUNTS

Fiscal Year	'09-'10	'10-'11	'11-'12	'12-'13	'13-'14
Totals	16,176	18,337	20,524	18,362	21,663

SOLID WASTE LANDFILL DISPOSAL

Fiscal Year	'09-'10 (tons)	'10-'11 (tons)	'11-'12 (tons)	'12-'13 (tons)	'13-'14 (tons)
July	373	356	345	311	300
August	369	405	343	311	372
September	390	337	355	299	310
October	324	311	307	335	339
November	321	366	334	308	330
December	298	364	301	244	305
January	265	286	311	229	299
February	229	248	212	224	278
March	333	337	366	304	309
April	370	329	311	350	382
May	306	440	374	398	401
June	365	332	351	340	288
Totals (tons)	3,943	4,111	3,910	3,653	3,913

RECYCLABLES

Fiscal Year	'09-'10 (lbs)	'10-'11 (lbs)	'11-'12 (lbs)	'12-'13 (lbs)	'13-'14 (lbs)
Corrugated	836,853	905,700	889,940	924,380	921,500
Clear Glass	64,156	74,091	81,894	76,905	70,880
Newsprint	406,798	409,661	411,613	390,478	318,807
All Paper	136,746	155,914	132,358	164,317	148,786
Plastics	115,508	132,827	139,684	150,570	150,183
Slick Paper	196,527	233,957	194,680	188,603	175,945
Alum/Steel Cans	59,853	62,727	60,851	60,863	54,207
Motor Oil (gal)	3,170	2,675	2,300	1,825	1,700
Appliances (ea)	251	121	350	420	397
Tires (each)	46	107	73	73	99
Electronics	305	452	447	450	348
Sub-Totals	1,816,441	1,974,877	1,911,020	1,956,116	1,840,308
Single-Stream					76,710
Totals	1,816,441	1,974,877	1,911,020	1,956,116	1,917,018

Note: Appliances & electronics are picked up and recycled by A-Line Metals in Cedar Falls
Tires are taken and recycled by Waverly Tire.

The motor oil is taken and recycled by Cedar Falls Oil Company.

Single-stream recyclables picked up curbside from May-June 2014: 76,710 lbs.

**Curbside Recycling
2013-2014
Number of Pickups**

	<u>Mon</u>	<u>Tues</u>	<u>Wed</u>	<u>Thurs</u>	<u>Fri</u>	<u>Weekly</u>	<u>Total</u>
July '13							
Week #1	<u>174</u>	<u>92</u>	<u>160</u>	<u>153</u>	<u>105</u>	<u>684</u>	
Week #3	<u>166</u>	<u>86</u>	<u>133</u>	<u>149</u>	<u>90</u>	<u>624</u>	<u>1308</u>
Aug '13							
Week #1	<u>153</u>	<u>107</u>	<u>151</u>	<u>166</u>	<u>107</u>	<u>684</u>	
Week #3	<u>171</u>	<u>94</u>	<u>104</u>	<u>149</u>	<u>104</u>	<u>622</u>	<u>1306</u>
Sep '13							
Week #1	<u>164</u>	<u>81</u>	<u>147</u>	<u>151</u>	<u>99</u>	<u>642</u>	
Week #3	<u>169</u>	<u>97</u>	<u>138</u>	<u>154</u>	<u>99</u>	<u>657</u>	<u>1299</u>
Oct '13							
Week #1	<u>199</u>	<u>117</u>	<u>190</u>	<u>193</u>	<u>103</u>	<u>802</u>	
Week #3	<u>192</u>	<u>86</u>	<u>171</u>	<u>142</u>	<u>94</u>	<u>685</u>	<u>1487</u>
Nov '13							
Week #1	<u>192</u>	<u>86</u>	<u>171</u>	<u>142</u>	<u>94</u>	<u>685</u>	
Week #3	<u>153</u>	<u>98</u>	<u>133</u>	<u>123</u>	<u>85</u>	<u>592</u>	<u>1277</u>
Dec '13							
Week #1	<u>172</u>	<u>105</u>	<u>179</u>	<u>105</u>	<u>104</u>	<u>665</u>	
Week #3	<u>153</u>	<u>78</u>	<u>142</u>	<u>145</u>	<u>107</u>	<u>625</u>	<u>1290</u>
Jan '14							
Week #1	<u>168</u>	<u>84</u>	<u>135</u>	<u>147</u>	<u>88</u>	<u>622</u>	
Week #3	<u>140</u>	<u>67</u>	<u>155</u>	<u>140</u>	<u>135</u>	<u>637</u>	<u>1259</u>
Feb '14							
Week #1	<u>152</u>	<u>89</u>	<u>148</u>	<u>154</u>	<u>75</u>	<u>618</u>	
Week #3	<u>152</u>	<u>90</u>	<u>141</u>	<u>162</u>	<u>87</u>	<u>632</u>	<u>1250</u>
Mar '14							
Week #1	<u>135</u>	<u>78</u>	<u>151</u>	<u>122</u>	<u>82</u>	<u>568</u>	
Week #3	<u>145</u>	<u>54</u>	<u>124</u>	<u>132</u>	<u>46</u>	<u>501</u>	<u>1069</u>
Apr '14							
Week #1	<u>139</u>	<u>78</u>	<u>145</u>	<u>131</u>	<u>78</u>	<u>571</u>	
Week #3	<u>145</u>	<u>87</u>	<u>118</u>	<u>97</u>	<u>82</u>	<u>529</u>	<u>1100</u>
May '14							
Week #1	<u>185</u>	<u>104</u>	<u>158</u>	<u>145</u>	<u>92</u>	<u>684</u>	
Week #3	<u>160</u>	<u>106</u>	<u>160</u>	<u>127</u>	<u>88</u>	<u>641</u>	<u>1325</u>
Jun '14							
Week #1	<u>192</u>	<u>86</u>	<u>171</u>	<u>142</u>	<u>94</u>	<u>685</u>	
Week #3	<u>153</u>	<u>98</u>	<u>133</u>	<u>123</u>	<u>85</u>	<u>592</u>	<u>1277</u>
Total for the FY 2013-2014							<u>15,247</u>

City of Waverly

Recycling Center Car Count '13-'14

Month	# of Days	7a-12:30p	% of total	12:30-5:30p	% of total	Monthly total	Daily avg
		& Saturdays					
July '13	27	944	57.24	1,033	42.76	2,416	89
		439					
Aug '13	27	1,177	62.00	1,197	38.00	3,150	117
		776					
Sep '13	24	1,126	62.49	1,050	37.51	2,799	117
		623					
Oct '13	27	1,268	58.51	1,451	41.49	3,497	130
		778					
Nov '13	24	1,028	62.59	1,236	37.41	3,304	138
		1,040					
Dec '13	25	1,234	56.98	1,440	43.02	3,347	134
		673					
Jan '14	26	1,060	65.25	951	34.75	2,737	105
		726					
Feb '14	24	868	62.31	865	37.69	2,295	96
		562					
Mar '14	25	1,050	64.30	1,041	35.70	2,916	117
		825					
Apr '14	26	1,137	56.18	1,379	43.82	3,147	121
		631					
May '14	26	1,146	62.58	1,215	37.42	3,247	125
		886					
Jun '14	25	1,177	56.63	1,353	43.37	3,120	125
		590					
Totals	279	12,271	60.73	13,178	39.27	33,559	120
		8,110					

CITY OF WAVERLY

RECYCLABLE QUANTITIES

July, 2013 - June, 2014

CITY	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	TOTALS
Paper, Bond	22,807	10,203	11,624	20,812	7,769	8,860	12,376	6,302	8,976	9,457	10,487	19,113	148,786
Slick Paper / Magazines	23,721	13,322	15,152	23,398	10,994	10,932	13,262	9,416	12,958	11,570	11,855	19,365	175,945
Newsprint	22,813	28,605	31,573	36,244	27,868	39,499	27,447	25,580	23,998	17,300	17,820	20,060	318,807
Corrugation/Chipboard	83,900	79,580	72,060	115,320	73,640	76,420	69,880	62,900	63,360	82,340	68,860	73,240	921,500
#3, 4, 5, 6, 7 Plastics	10,120	14,789	13,950	18,020	7,570	17,364	11,080	11,566	9,640	10,080	16,353	9,651	150,183
Steel/Alum.	3,659	2931	4341	5880	5089	7560	3595	5446	5473	4208	2621	3404	54,207
Clear Glass	4,480	8020	4100	3780	4340	4500	15220	4880	4940	8300	4260	4060	70,880
Motor Oil	275	200	275	200	150	125	0	0	125	175	75	100	1,700
GRAND TOTAL *	171,775	157,450	152,800	223,454	137,270	165,135	152,860	126,090	129,345	143,255	132,256	148,893	1,840,308

* Excludes Motor Oil

City of Waverly

SOLID WASTE & RECYCLABLES REVENUE

July, 2013 - June, 2014

Date	SOLID WASTE				RECYCLABLES					TOTAL SOLID WASTE & RECYCLABLE REVENUE
	Utility Billing	Sticker Sales	Temp. Dumpsters & Misc.	Total Solid Waste Revenue	Paper Products	Steel & Aluminum	Plastic	Used Oil	Total Recyclable Revenue	
Jul-13	76,264.78	14,130.50	621.86	91,017.14	819.57	154.39	130.00	157.50	1,261.46	92,278.60
Aug-13	81,892.49	5,189.50	457.21	87,539.20	985.26	144.79	66.84	247.50	1,444.39	88,983.59
Sep-13	77,572.20	7,526.00	35.79	85,133.99	678.30	99.03	96.26	180.00	1,053.59	86,187.58
Oct-13	80,447.65	8,526.25	66.73	89,040.63	805.92	128.99	93.92	247.50	1,276.33	90,316.96
Nov-13	84,550.66	6,833.25	2,046.58	93,430.49	1,102.76	143.34	121.42	180.00	1,547.52	94,978.01
Dec-13	88,063.69	3,401.75	0.00	91,465.44	631.19	180.27	50.47	135.00	996.93	92,462.37
Jan-14	89,386.61	6,826.25	206.58	96,419.44	740.67	189.00	118.81	112.50	1,160.98	97,580.42
Feb-14	91,034.35	3,400.00	413.29	94,847.64	566.48	99.63	76.19	315.00	1,057.30	95,904.94
Mar-14	92,311.49	178.23	356.83	92,846.55	562.16	173.49	115.67	0.00	851.32	93,697.87
Apr-14	91,687.29	24.50	35.79	91,747.58	614.80	159.11	151.48	112.50	1,037.89	92,785.47
May-14	93,093.36	5,126.25	634.10	98,853.71	646.24	133.77	158.93	157.50	1,096.44	99,950.15
Jun-14	95,399.67	850.00	718.63	96,968.30	739.97	104.94	258.39	180.00	1,283.30	98,251.60
TOTALS	1,041,704.24	62,012.48	5,593.39	\$ 1,109,310.11	8,893.32	1,710.75	1,438.38	2,025.00	\$ 14,067.45	\$ 1,123,377.56
Received from Black Hawk County Landfill on 8/27/14 to assist with funding of recycling & waste reduction										\$ 3,331.34
TOTAL REVENUES										\$ 1,126,708.90

City of Waverly
SOLID WASTE LANDFILL DISPOSAL

		2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
		Tons	Tons	Tons	Tons	Tons	Tons
July	<i>Residential:</i>	128.87	138.13	143.89	138.56	124.12	102.49
	<i>Commercial:</i>	284.16	234.56	211.59	206.02	186.55	197.63
		413.0	372.7	355.5	344.6	310.7	300.1
August	<i>Residential:</i>	131.75	125.21	164.57	141.69	127.4	144.43
	<i>Commercial:</i>	232.56	243.47	239.93	201.53	183.58	226.89
		364.3	368.7	404.5	343.2	311.0	371.3
September	<i>Residential:</i>	128.04	134.63	125.13	135.59	107.27	136.37
	<i>Commercial:</i>	221.43	254.91	211.93	219.35	191.05	173.7
		349.5	389.5	337.1	354.9	298.3	310.1
October	<i>Residential:</i>		88.13	121.11	88.83	122.7	114.26
	<i>Commercial:</i>	251.42	235.58	189.38	218.04	212.43	224.65
		251.4	323.7	310.5	306.9	335.1	338.9
November	<i>Residential:</i>	109.11	121.83	134.54	147.3	112.57	137.75
	<i>Commercial:</i>	206.03	198.44	231.19	186.21	194.81	192.28
		315.1	320.3	365.7	333.5	307.4	330.0
December	<i>Residential:</i>	143.77	125.67	138.4	106.68	103.44	119.01
	<i>Commercial:</i>	220.93	172.34	225.76	194.37	140.49	185.39
		364.7	298.0	364.2	301.1	243.9	304.4
January	<i>Residential:</i>	126.91	105.96	101.54	122.95	140.4	152.42
	<i>Commercial:</i>	198.57	158.93	184.42	187.7	88.79	145.97
		325.5	264.9	286.0	310.7	229.2	298.4
February	<i>Residential:</i>	101.96	89.03	83.56	78.05	92.34	100.5
	<i>Commercial:</i>	199.68	139.88	163.94	134.19	131.21	177.45
		301.6	228.9	247.5	212.2	223.6	278.0
March	<i>Residential:</i>	112.2	116.91	116.87	140.45	115.31	112.61
	<i>Commercial:</i>	262.25	215.39	220.11	225	188.59	196.4
		374.5	332.3	337.0	365.5	303.9	309.0
April	<i>Residential:</i>	106.48	132.44	102.42	98.14	128.3	128.2
	<i>Commercial:</i>	207.09	237.16	226.55	212.59	221.8	253.56
		313.6	369.6	329.0	310.7	350.1	381.8
May	<i>Residential:</i>	87.96	110.71	194.4	122.95	121.1	150.96
	<i>Commercial:</i>	230.03	194.62	245.86	250.85	276.48	249.33
		318.0	305.3	440.3	373.8	397.6	400.3
June	<i>Residential:</i>		118.33	107.79	140.13	122.12	95.89
	<i>Commercial:</i>	217.74	246.44	223.9	211.1	217.48	191.57
		217.7	364.8	331.7	351.2	339.6	287.5
TOTAL		3,908.9	3,938.7	4,108.8	3,908.3	3,650.3	3,909.7

DEPARTMENT OF PUBLIC WORKS

EQUIPMENT SERVICES DIVISION

The Equipment Services Department is responsible for routine maintenance and major breakdown and repairs for City vehicles as well as any welding or fabrication that may be needed. Equipment Services also purchases parts utilized and inventoried for vehicles.

Fiscal Year	'09-'10	'10-'11	'11-'12	'12-'13	'13-'14
Service Jobs	792	712	794	733	744
New Tires	99	56	92	83	72
Tire Repairs	43	56	76	53	44
Batteries	7	8	7	3	7
Antifreeze (Gals)	71	29	55	43	72
Oil Changes	210	175	227	194	197
Oil (Gals)	697	513	739	628	639
Total Parts (\$)	\$81,775	\$93,949	\$106,339	\$86,165	\$104,020
Total Labor Charged	\$47,180	\$50,715	\$63,789	\$40,437	\$48,512
Unleaded Fuel (Gals)	25,226	25,389	27,181	25,881	26,798
Unleaded Fuel (\$)	\$58,654	\$59,774	\$92,813	\$90,230	\$90,460
Diesel Fuel (Gals)	44,739	40,805	39,755	32,983	38,579
Diesel Fuel (\$)	\$113,975	\$125,649	\$152,967	\$129,518	\$148,410

DEPARTMENT OF PUBLIC WORKS

WATER DIVISION

The Water Division is responsible for the operation and maintenance of the total 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

The Water Division supplies water to Waverly residents and industry utilizing four wells, three towers, and approximately 74 miles of water main. This includes 690 fire hydrants, 860 water main valves, over 510 hydrant valves, and 3,550 meters. The pumping capacity of the system is approximately 5,100 gallons per minute and total storage of 1,750,000 gallons elevated. The average daily pumpage for FY '13-'14 was 1,059,384 gallons per day.

During FY '13-'14, the Water Division continued to locate and correct water leaks. Our billing to pumpage accountability has been calculated at 85%.

FUTURE PROJECTS

1. Continue replacement of older system valves and hydrants.
2. Continue education on the ever changing regulations set forth by the IDNR and USEPA to insure a safe drinking water system
3. Continue with the Source Water Protection Plan to reduce or eliminate certain contaminants from entering our ground water source and to educate the public on the importance such a plan

City of Waverly
Water Department
Activity for Fiscal Year '13-'14

Meter Department	Totals
New Meter Installations	66
Meters Replaced	89
Seasonal In	4
Seasonal Out	35
ERTs	271
ERTs Replaced	1
Generators	n/a
Meters Tested & Repaired	3
Construction Meters	1
Service Lines	Totals
Capped Services	11
Service Line Taps	15
Sound Detection	12
Water Mains	Totals
Repaired	50
Replaced	16
Sound Detection	8
Valves & Valve Boxes	Totals
Valves Operated	89
Valves Installed	6
Valves Repaired	1
Valves Replaced	n/a
Boxes Repaired	6
Boxes Installed	n/a
Boxes Cleaned	n/a
Boxes Raised	2
Boxes Lowered	n/a
Number of Locates	Totals
Iowa One Call	1,214
Water Mains	28
Storm Sewer	1387
Water	1,866
Valve Boxes	955
Sanitary Sewer	1,429
Service Line	49

Hydrants	Totals
Flushed	692
Repaired	6
Replaced	n/a
Installed	n/a
Painted	n/a
Flagged	4
Water Towers	Visits
Interior	100
Exterior	81
Mowing	n/a
Wells	Visits
Interior	355
Exterior	271
Mowing	n/a
Other Projects	Hours
Contractors	41
Other City Departments	28
Service Center	Hours
Record Keeping (# of Hours)	410
Equipment Maintenance (Hrs)	114
Building Maintenance (Hrs)	133
Customer Care	113
Number of Samples Taken	Totals
Bacteria	87
Chlorine	1,377
Fluoride	453
Nitrate	9

Water Consumption	Gallons
Salesman Gallons	52,900
Salesman Revenue	\$264.00
City Consumption	3,754,000
Highest Pumping Day	1,409,083
Lowest Pumping Day	886,667
Average Pumping Day	1,058,667
Total Gallons Pumped	386,675,000

OPERATIONAL DATA FOR WATER SYSTEM REPAIRS

Fiscal Year	'09-'10	'10-'11	'11-'12	'12-'13	'13-'14
Main Lines	7	22	20	21	26
Service Lines	34	21	10	16	16
4" Valves Installed	n/a	n/a	n/a	n/a	2
6" Valves Installed	n/a	n/a	n/a	n/a	2
8" Valves Installed	n/a	n/a	n/a	n/a	1
12" Valves Installed	n/a	n/a	n/a	n/a	n/a
Service Lines Capped	11	11	3	7	14
3/4" Taps Made	0	0	0	0	4
1"-2" Taps Made	5	2	6	4	15
4" Taps Made	0	0	0	0	1
6" Taps Made	0	2	0	1	1
8" Taps Made	1	0	0	1	1

GALLONS PUMPED VERSUS GALLONS BILLED

Fiscal Year	Gallons Pumped	Estimated Unmetered Gallons*	Gallons Billed	Percent Accountable
2013-14	386,675,000	59,198,000	270,427,000	85%
2012-13	445,886,000	116,944,000	266,859,000	86%
2011-12	329,465,000	70,288,000	259,177,000	86%
2010-11	330,870,000	24,259,000	255,326,000	84%
2009-10	356,739,000	23,887,000	241,960,078	68%
2008-09	369,679,000	16,108,000	257,856,537	70%
2007-08	352,075,000	19,488,666	268,324,879	82%
2006-07	333,907,000	15,413,000	271,202,622	86%
2005-06	320,782,000	11,960,000	267,136,838	87%
2004-05	336,927,000	14,645,527	262,408,958	78%
2003-04	389,947,000	13,564,000	290,155,000	74%
2002-03	408,101,000	21,608,460	282,336,168	69%
2001-02	364,192,000	7,300,000	263,336,168	72%

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

DEPARTMENT OF PUBLIC WORKS

WATER POLLUTION CONTROL

The Water Pollution Control Division operates and maintains the wastewater treatment facilities for the City. These facilities are the treatment plant, main lift station, and nine smaller lift stations. The testing and monitoring of industrial discharges plus disposal of biosolids are also the responsibility of the WPC division. The efficient operation and maintenance of these facilities are required by permits and monitored by State and Federal agencies, DNR and EPA.

The WPC Facility and staff conducted several tours throughout the school year to elementary, high school, and Wartburg College classes. Staff has also made classroom or site presentations to different classes or interested groups.

This completes a brief overview of the past fiscal year. Although not a complete summary, it does not represent the knowledge and expertise needed to operate and maintain an efficient Waste Treatment Facility. It is our method of recycling a very precious resource – WATER. This is one reason that some cities are referring to their waste treatment facilities as WATER RECLAMATION FACILITIES.

CURRENT PROJECTS

1. Greenfield and 6th Avenue NW lift stations
2. Evaluation of plant performance

FUTURE PROJECTS

1. Eastgate Lift Station
2. Flow measurement at each outfall as well as influent.

PROBLEM AREAS OR AREAS OF CONCERN

1. Shortage of qualified and accessible land for biosolids application.
2. The need to upgrade process controls.
3. Budgets must continue to reflect the need to upgrade lift stations and aging equipment.

Date: July, 2013

City of Waverly
MONTHLY MONITORING REPORT
DISCHARGE SERIAL # 001

Facility Number 0990001

DAY OF MONTH	DAY OF WEEK	RAW TEMP °F.	FLOW MGD	DIGESTER CONTENTS				CBOD 5 DAY 20 °C				TOTAL SUSPENDED SOLIDS				Settleable Solids FINAL mg/L	AMMONIA FINAL MG/L	NITROGEN FINAL LBS/DAY	RAW pH	TEMP °F. FINAL		
				TEMP °F.	MG/L	MG/L	MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY								
1	Mon.	59	2.070	95	7.15	398	3660												7.6	8.4	63	
2	Tues.	59	2.110	95	7.18														1.00	1.00	64	
3	Wed.	60	1.870	95	7.18			82	1279	4	62	168	2820	10	156				1.00	1.00	63	
4	Thurs.	60	1.900	95	7.14														1.00	1.00	64	
5	Fri.	60	1.760	95	7.15	360	3580	54	793	4	59	146	2143	7	103				0.00	0.00	64	
6	Sat.		1.790																			
7	Sun.		1.610																			
8	Mon.	60	1.820	95	7.10	368	3600												1.00	1.00	65	
9	Tues.	60	1.560	95	7.09														2.00	2.00	65	
10	Wed.	60	1.590	96	7.10			133	1764	8	106	214	2838	13	172				2.00	2.00	65	
11	Thurs.	60	1.540	96	7.10														1.00	1.00	65	
12	Fri.	61	1.480	95	7.09	360	3150	101	1247	8	99	192	2370	8	99				<0.50	0.00	65	
13	Sat.		1.430																			
14	Sun.		1.370																			
15	Mon.	62	1.550	95	7.10	360	3170												1.00	1.00	65	
16	Tues.	62	1.570	95	7.10														2.00	2.00	65	
17	Wed.	62	1.470	95	7.09			102	1250	9	110	198	2427	12	147				<0.50	0.00	65	
18	Thurs.	62	1.530	95	7.09														1.00	1.00	66	
19	Fri.	63	1.420	94	7.10	420	3330	130	1540	8	95	246	2913	14	166				2.00	2.00	66	
20	Sat.		1.330																			
21	Sun.		1.360																			
22	Mon.	63	1.380	95	7.45	435	3330												1.00	1.00	66	
23	Tues.	63	1.330	95	7.41														1.00	1.00	66	
24	Wed.	63	1.310	95	7.43			123	1344	10	109	181	1977	16	175				2.00	2.00	66	
25	Thurs.	63	1.570	95	7.47														2.00	2.00	66	
26	Fri.	63	1.330	95	7.48	435	3370	107	1187	9	100	178	1974	12	133				2.00	2.00	66	
27	Sat.		1.220																			
28	Sun.		1.270																			
29	Mon.	64	1.350	95	7.45	428	3370												1.00	1.00	65	
30	Tues.	64	1.290	95	7.41														0.00	0.00	65	
31	Wed.	64	1.260	95	7.45			130	1366	8	84	233	2448	7	74				0.00	0.00	65	
TOTAL			47.440					962.0	11769	68.0	824	1756.0	21712	99.0	1224				6.0	66.4		
AVERAGE		61.6	1.530	95.0	7.2			106.9	1308	7.6	92	195.1	2412	11.0	136				1.5	6.6		
MAX		64.0	2.110	96.0	7.5			133.0	1764	10.0	110	246.0	2913	16.0	175				2.0	22.2		
MIN		59.0	1.220	94.0	7.1			54.0	793	4.0	59	146.0	1974	7.0	74				1.0	0.0		
7 DAY AVERAGE																						
WEEK 1		59.6	1.873					68.0	1036	4.0	61	157.0	2382	8.5	129				0.0	0.0	63.6	
WEEK 2		59.8	1.541					117.0	1505	8.0	102	203.0	2604	10.5	136				0.0	0.0	65.0	
WEEK 3		60.0	1.461					116.0	1395	8.5	103	222.0	2670	13.0	156				1.0	5.9	65.4	
WEEK 4		63.0	1.344					115.0	1265	9.5	105	179.5	1976	14.0	154				2.0	22.0	66.0	

Signature: _____
Certification Number: 3989

Note: 0.0 = <MDL of 0.5

Date: August, 2013

City of Waverly
MONTHLY MONITORING REPORT
DISCHARGE SERIAL # 001

Facility Number 0990001

DAY OF MONTH	DAY OF WEEK	RAW TEMP. °F.	FLOW MGD	TEMP °F.	DIGESTER CONTENTS				CBOD 5 DAY 20 °C				TOTAL SUSPENDED SOLIDS				Settleable Solids EFFLUENT mg/L	AMMONIA NITROGEN		RAW pH	TEMP. °F.					
					VOL. MG/L	ACID MG/L	ALKALIN MG/L	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	FINAL MG/L		FINAL LBS/DAY	RAW FINAL		FINAL					
1	Thurs.	64	1.280	95	7.09																		7.9	8.7	65	
2	Fri.	64	1.220	95	7.09	388		3120	96	977	7	71	177	1801	8	81		1.00		1.00	10.17		7.9	8.7	65	
3	Sat.		1.150																							
4	Sun.		1.200																							
5	Mon.	64	1.410	95	7.09	360		3170																		
6	Tues.	64	1.280	95	7.10																					
7	Wed.	64	1.250	95	7.10				88	917	5	52	163	1699	7	73		0.00		<0.50	0.00		7.5	8.3	66	
8	Thurs.	64	1.340	95	7.13																					
9	Fri.	64	1.220	95	7.13	360		3210	122	1241	5	51	211	2147	3	31		0.00		1.00	10.17		7.5	8.3	66	
10	Sat.		1.110																							
11	Sun.		1.370																							
12	Mon.	64	1.300	95	7.07	368		3200																		
13	Tues.	64	1.230	95	7.05																					
14	Wed.	63	1.250	95	7.06				83	865	7	73	174	1814	6	63		0.00		2.00	20.85		7.5	8.3	66	
15	Thurs.	63	1.260	95	7.06																					
16	Fri.	64	1.130	96	7.05	428		3100	104	980	5	47	192	1809	7	66		0.00		1.00	9.42		7.5	8.3	67	
17	Sat.		1.180																							
18	Sun.		1.190																							
19	Mon.	63	1.270	95	7.03	420		3120																		
20	Tues.	63	1.200	95	7.04																					
21	Wed.	64	1.230	95	7.03				86	882	6	62	181	1857	6	62		0.00		<0.50	0.00		7.5	8.3	68	
22	Thurs.	63	1.370	95	7.03																					
23	Fri.	63	1.190	95	7.02	413		3340	134	1330	5	50	206	2044	5	50		0.00		<0.50	0.00		7.4	8.2	68	
24	Sat.		1.190																							
25	Sun.		1.200																							
26	Mon.	64	1.220	95	7.04	398		3340																		
27	Tues.	64	1.170	95	7.03				170	1659	6	59	194	1893	7	68		0.00		<0.50	0.00		7.5	8.4	70	
28	Wed.	64	1.180	95	7.03																					
29	Thurs.	64	1.150	95	7.05				92	882	5	48	170	1630	7	67		0.00		<0.50	0.00		7.5	8.3	70	
30	Fri.	64	1.140	95	7.05																					
31	Sat.		1.020																							
TOTAL			37.910						975.0	9734	51.0	512	1668.0	16695	56.0	560										
AVERAGE			63.7			7.1			108.3	1082	5.7	57	185.3	1855	6.2	62										
MAX			64.0			96.0			170.0	1659	7.0	73	211.0	2147	8.0	81										
MIN			63.0			7.0			83.0	865	5.0	47	163.0	1630	3.0	31										
7 DAY AVERAGE																										
WEEK 1			64.0						92.0	947	6.0	62	170.0	1750	7.5	77										
WEEK 2			64.0						102.5	1053	6.0	62	192.5	1980	4.5	47										
WEEK 3			64.0						95.0	931	5.5	54	186.5	1833	6.5	64										
WEEK 4			63.6						152.0	1494	5.5	54	200.0	1969	6.0	59										

Signature: _____
Certification Number: 3989

Note: 0.0 = <MDL of 0.5

Date: September, 2013

City of Waverly
MONTHLY MONITORING REPORT
DISCHARGE SERIAL # 001

Facility Number 0990001

DAY OF MONTH	DAY OF WEEK	RAW TEMP °F.	FLOW MGD	DIGESTER CONTENTS				CBOD 5 DAY 20 °C				TOTAL SUSPENDED SOLIDS				Settleable Solids EFFLUENT mg/L	AMMONIA NITROGEN		RAW pH	TEMP °F.							
				TEMP °F.	ph	VOL. MG/L	ACIDAL MG/L	KALIN MG/L	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L		EFF. LBS/DAY	FINAL MG/L		FINAL LBS/DAY	FINAL	FINAL					
1	Sun.	65	0.990																								
2	Mon.	65	1.110	95	7.06	413	3290																				
3	Tues.	66	1.110	95	7.04																						
4	Wed.	66	1.120	95	7.04			200	1868	5	47	298	2784	7	65												
5	Thurs.	65	1.120	95	7.04																						
6	Fri.	85	1.030	94	7.01			141	1211	6	52	228	1959	5	43												
7	Sat.		1.060																								
8	Sun.		1.050																								
9	Mon.	65	1.090	95	7.00	360	2620																				
10	Tues.	65	1.180	95	7.01																						
11	Wed.	66	1.100	95	7.01			259	2376	5	46	297	2725	7	64												
12	Thurs.	65	1.060	95	7.00																						
13	Fri.	65	1.000	95	6.98	330	2730																				
14	Sat.		1.020					182	1518	6	50	294	2118	7	58												
15	Sun.		1.060																								
16	Mon.	65	1.030	94	7.08	330	2750																				
17	Tues.	65	1.030	95	7.05																						
18	Wed.	65	1.040	95	7.06			122	1058	6	52	187	1622	5	43												
19	Thurs.	65	1.160	95	7.07																						
20	Fri.	65	1.020	95	7.08	338	2850																				
21	Sat.		0.970					163	1387	8	68	243	2067	6	51												
22	Sun.		1.020																								
23	Mon.	65	1.050	95	7.08	338	2820																				
24	Tues.	65	1.010	95	7.07																						
25	Wed.	65	1.070	95	7.07			144	1285	5	45	260	2320	9	80												
26	Thurs.	65	1.020	95	7.05	353	2790																				
27	Fri.	65	0.930	95	7.03			116	900	7	54	260	2017	13	101												
28	Sat.		0.990																								
29	Sun.		1.010																								
30	Mon.	65	0.990	95	7.04																						
31																											
TOTAL			31.400					1327.0	11603	48.0	413	2027.0	17611	59.0	506												
AVERAGE		65.0	1.047	94.9	7.0			165.9	1450	6.0	52	253.4	2201	7.4	63												
MAX		66.0	1.180	95.0	7.1			259.0	2376	8.0	68	298.0	2784	13.0	101												
MIN		65.0	0.930	94.0	7.0			116.0	900	5.0	45	187.0	1622	5.0	43												
7 DAY AVERAGE																											
WEEK 1		65.0	1.077					170.5	1540	5.5	49	263.0	2371	6.0	54												
WEEK 2		65.0	1.066					220.5	1947	5.5	48	275.5	2422	7.0	61												
WEEK 3		65.0	1.044					142.5	1222	7.0	60	215.0	1845	5.5	47												
WEEK 4		65.0	1.013					130.0	1092	6.0	49	260.0	2168	11.0	91												

Signature: _____
Certification Number 3989

City of Waverly

MONTHLY MONITORING REPORT

DISCHARGE SERIAL # 001

Facility Number 0990001

Date: October, 2013

DAY OF MONTH	DAY OF WEEK	RAW TEMP. °F.	FLOW MGD	TEMP °F.	DIGESTER CONTENTS				CBOD 5 DAY 20 °C				TOTAL SUSPENDED SOLIDS				Settleable Solids EFFLUENT mg/L	AMMONIA NITROGEN FINAL MG/L	FINAL LBS/DAY	RAW pH	FINAL pH	TEMP °F.				
					PH	VOL. ACID	ALKALIN	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY											
1	Tues.	65	1.080	96	7.01		348		2520		91	767	8	67	292	2460	11	93	1.00			7.5	8.3	66		
2	Wed.	65	1.010	96	7.01														1.00			7.5	8.3	66		
3	Thurs.	65	1.180	96	7.03														1.00			7.5	8.4	65		
4	Fri.	64	1.030	96	7.02		350		2520		134	1151	8	69	228	1959	11	94	1.00			7.6	8.3	65		
5	Sat.		1.020																							
6	Sun.		1.060						2540																	
7	Mon.	64	1.090	96	6.99		353												0.00			7.5	8.3	65		
8	Tues.	64	1.100	96	7.03														0.00			7.6	8.3	65		
9	Wed.	64	1.010	95	6.98						137	1154	7	59	239	2182	8	67	1.00			7.6	8.3	64		
10	Thurs.	64	1.050	95	6.99														1.00			7.6	8.3	64		
11	Fri.	64	1.030	95	6.96		353		2480		144	1237	7	60	257	2208	8	69	1.00			7.5	8.3	64		
12	Sat.		1.000																							
13	Sun.		1.030	95	6.99		345		2480										1.00			7.7	8.3	63		
14	Mon.	64	1.000	95	6.99														0.00			7.6	8.3	64		
15	Tues.	64	1.050	95	7.03						135	1182	6	53	352	3082	9	79	1.00			7.6	8.3	63		
16	Wed.	64	0.960	95	6.99														1.00			7.6	8.4	63		
17	Thurs.	64	1.010	95	7.00		345		2520		154	1297	8	67	232	1954	8	67	1.00			7.7	8.3	63		
18	Fri.		0.850																							
19	Sat.		0.940																							
20	Sun.		0.960	95	7.01		338		2500										1.00			7.6	8.3	60		
21	Mon.	63	0.980	95	6.99						222	1814	8	65	288	2190	10	82	1.00			7.7	8.3	60		
22	Tues.	63	0.890	95	7.02														1.00			7.7	8.3	60		
23	Wed.	63	0.910	94	7.02														1.00			7.6	8.4	60		
24	Thurs.	63	0.890	95	7.00														1.00			7.7	8.3	60		
25	Fri.	63	0.910	94	7.02		323		2660		154	1143	7	52	145	1076	8	59	1.00			7.7	8.3	60		
26	Sat.		0.820																							
27	Sun.	27	0.950																							
28	Mon.	63	0.830	95	7.00		330		2630										1.00			7.7	8.3	59		
29	Tues.	63	0.990	95	7.00														1.00			7.6	8.3	59		
30	Wed.	63	1.060	95	7.02						145	1282	8	71	159	1406	8	71	1.00			7.7	8.2	59		
31	Thurs.	63	0.930	95	7.02														1.00			7.7	8.2	60		
TOTAL			30.710								1316.0	11027	67.0	563	2192.0	18517	81.0	681				6.0	49.9			
AVERAGE			0.991		7.0						146.2	1225	7.4	63	243.6	2057	9.0	76				1.0	5.5			
MAX			1.180		96.0						222.0	1814	8.0	71	352.0	3082	11.0	94				1.0	8.8			
MIN			0.820		94.0						91.0	767	6.0	52	145.0	1076	8.0	59				1.0	0.0			
7 DAY AVERAGE																										
WEEK 1			64.6		1.067						112.5	959	8.0	68	260.0	2209	11.0	94				1.0	4.3			
WEEK 2			64.4		1.031						140.5	1195	7.0	60	283.0	2195	8.0	68				1.0	4.2			
WEEK 3			64.2		0.967						144.5	1240	7.0	60	292.0	2518	8.5	73				1.0	4.2			
WEEK 4			63.0		0.986						188.0	1479	7.5	59	206.5	1633	9.0	71				1.0	7.8			

Signature: _____
 Certification Number: 3989

Note: 0.0 = <MIDL of 0.5

City of Waverly

MONTHLY MONITORING REPORT

DISCHARGE SERIAL # 001

Date: November, 2013

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	RAW TEMP °F.	FLOW MGD	DIGESTER CONTENTS						CBOD 5 DAY 20 °C						TOTAL SUSPENDED SOLIDS						Settleable Solids EFFLUENT mg/L	AMMONIA NITROGEN FINAL MG/L	FINAL PH	TEMP °F.
				TEMP °F.	PH	VOL. ACIDALKALIN MG/L	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY							
1	Fri.	61	0.910	95	7.02	345	2850	166	1260	6	46	167	1267	7	53	0.00	<0.50	0.00	7.8	8.3	59				
2	Sat.		0.920																						
3	Sun.		0.960																						
4	Mon.	61	0.920	95	7.02	345	2760									1.00			7.7	8.3	59				
5	Tues.	61	1.290	95	7.01											1.00	<0.50	0.00	7.6	8.3	59				
6	Wed.	61	1.000	95	7.02			125	1043	9	75	185	1376	9	75	1.00			7.6	8.2	60				
7	Thurs.	61	0.900	95	7.03											1.00	<0.50	0.00	7.6	8.2	59				
8	Fri.	61	0.910	95	7.03	323	2840	120	911	10	76	107	812	7	53	0.00			7.7	8.3	59				
9	Sat.		0.970																						
10	Sun.		0.910																						
11	Mon.	61	0.840	95	7.00	330	2910									0.00			7.7	8.3	58				
12	Tues.	61	0.840	95	7.03											0.00			7.6	8.3	57				
13	Wed.	60	0.920	95	6.99			144	1105	6	46	182	1243	11	84	1.00	1.00	7.67	7.6	8.2	57				
14	Thurs.	60	0.960	95	6.97											1.00	<0.50	0.00	7.6	8.2	56				
15	Fri.	61	0.860	95	6.97	518	2710	141	1011	6	43	148	1062	6	43	0.00			7.5	8.2	56				
16	Sat.		0.930																						
17	Sun.		0.920																						
18	Mon.	60	0.900	95	7.09	488	2720									0.00			7.5	8.3	55				
19	Tues.	60	0.940	95	7.08											0.00			7.6	8.2	55				
20	Wed.	60	0.840	95	7.10			143	1002	4	28	196	1373	4	28	0.00	<0.50	0.00	7.5	8.3	55				
21	Thurs.	59	0.930	95	7.12											0.00			7.5	8.3	54				
22	Fri.	59	0.880	95	7.13	345	3010	157	1152	6	44	196	1438	5	37	0.00	<0.50	0.00	7.6	8.3	54				
23	Sat.		0.810																						
24	Sun.		0.830																						
25	Mon.	58	0.790	95	7.13	353	3030									0.00			7.6	8.3	51				
26	Tues.	58	0.840	92	7.12											0.00			7.5	8.3	51				
27	Wed.	57	0.840	94	7.12			172	1205	7	49	166	1163	6	42	0.00	<0.50	0.00	7.6	8.3	51				
28	Thurs.	57	0.740	94	7.12											0.00			7.6	8.3	51				
29	Fri.	57	0.720	95	7.10											0.00			7.6	8.3	50				
30	Sat.		0.820																						
31	Sat.																								
TOTAL			26.840					1168.0	8688	54.0	407	1307.0	9735	55.0	415				1.0	7.7					
AVERAGE			59.7		94.8	7.1		146.0	1086	6.8	51	163.4	1217	6.9	52				1.0	1.0	7.7				
MAX			61.0		95.0	7.1		172.0	1260	10.0	76	196.0	1438	11.0	84				1.0	7.7	7.8				
MIN			57.0		92.0	7.0		120.0	911	4.0	28	107.0	812	4.0	28				1.0	0.0	7.5				
7 DAY AVERAGE																									
WEEK 1			61.0		0.986			145.5	1151	7.5	60	166.0	1322	8.0	64				0.0	0.0	7.7				
WEEK 2			61.0		0.907			132.0	1008	8.0	61	134.5	1028	9.0	69				1.0	3.8	7.6				
WEEK 3			61.0		0.903			142.0	1007	5.0	36	172.0	1217	5.0	36				0.0	0.0	7.5				
WEEK 4			57.8		0.819			164.5	1179	6.5	47	181.0	1301	5.5	39				0.0	0.0	7.6				

Signature: _____
 Certification Number: 3989

City of Waverly

MONTHLY MONITORING REPORT

Date: January, 2014

DISCHARGE SERIAL # 001

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	RAW TEMP °F.	FLOW MGD	DIGESTER CONTENTS				CBOD 5 DAY 20 °C				TOTAL SUSPENDED SOLIDS				Settleable Solids FINAL EFFLUENT mg/L	AMMONIA NITROGEN FINAL MG/L	NITROGEN FINAL LBS/DAY	RAW pH	FINAL pH	TEMP °F.	
				TEMP °F.	ph	VOL. ACID/LALIN MG/L	KALIN MG/L	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY							
1	Wed.	52	0.710	96	6.90														4.6	8.2	45	
2	Thurs.	53	0.760	96	6.92									0.00					7.5	8.2	45	
3	Fri.	53	0.780	96	6.90	308	2420	192	1249	4	26	264	1717	0.00	<0.50	0.00		7.6	8.2	44		
4	Sat.		0.790																			
5	Sun.		0.680																			
6	Mon.	52	0.790	96	6.91	315	2440							0.00				7.7	8.2	45		
7	Tues.	52	0.790	96	6.90									0.00				7.6	8.4	44		
8	Wed.	52	0.880	96	6.94			177	1299	6	44	184	1350	0.00	1.00	7.34		7.7	8.3	45		
9	Thurs.	51	0.800	96	6.91									0.00				7.7	8.3	45		
10	Fri.	52	0.820	96	6.92	170	2330	142	971	8	55	166	1135	0.00	1.00	6.84		7.8	8.4	46		
11	Sat.		0.830																			
12	Sun.		0.820																			
13	Mon.	52	0.840	96	6.92	278	2390							0.00				7.7	8.4	48		
14	Tues.	52	0.820	96	6.93									0.00				7.7	8.3	48		
15	Wed.	52	0.810	96	6.91			169	1142	5	34	209	1412	0.00	1.00	6.76		7.6	8.3	47		
16	Thurs.	52	0.850	96	6.91									0.00				7.6	8.4	48		
17	Fri.	52	0.760	96	6.94	285	2430	151	957	5	32	203	1287	0.00	<0.50	0.00		7.7	8.4	48		
18	Sat.		0.840																			
19	Sun.		0.820																			
20	Mon.	52	0.840	96	6.93	285	2420							0.00				7.7	8.3	49		
21	Tues.	52	0.700	96	6.93									0.00				7.6	8.4	48		
22	Wed.	52	0.760	96	6.92			170	1078	5	32	158	1001	0.00	<0.50	0.00		7.7	8.3	48		
23	Thurs.	52	0.800	96	6.92									0.00				7.7	8.3	47		
24	Fri.	52	0.890	96	6.92	345	2460	237	1759	7	52	233	1729	0.00	1.00	7.42		7.7	8.3	47		
25	Sat.		0.850																			
26	Sun.		0.074																			
27	Mon.	51	0.710	96	6.96	345	2480							0.00				7.7	8.2	44		
28	Tues.	51	0.780	96	6.96									0.00				7.8	8.3	44		
29	Wed.	51	0.870	96	6.95			137	994	4	29	144	1045	0.00	<0.50	0.00		7.8	8.3	44		
30	Thurs.	51	0.930	96	6.97									0.00				7.7	8.3	45		
31	Fri.	51	0.820	96	6.99	338	2540	145	992	5	34	193	1320	1.00	<0.50	0.00		7.6	8.3	44		
TOTAL				24.194				1520.0	10440	49.0	337	1754.0	11997	38.0	262		4.0	28.4				
AVERAGE				51.8	0.780			168.9	1160	5.4	37	194.9	1333	4.2	29		1.0	3.2		7.8	8.4	49.0
MAX				53.0	0.930			237.0	1759	8.0	55	264.0	1729	8.0	55		1.0	7.4		7.8	8.4	48.0
MIN				51.0	0.074			137.0	957	4.0	26	144.0	1001	2.0	13		1.0	0.0		4.6	8.2	44.0
7 DAY AVERAGE																						
WEEK 1				52.4	0.757			192.0	1245	4.0	26	264.0	1717	3.0	20		0.0	0.0		7.0	8.2	44.6
WEEK 2				52.4	0.830			159.5	1135	7.0	49	175.0	1243	4.0	28		1.0	7.1		7.7	8.3	46.4
WEEK 3				52.0	0.803			160.0	1045	5.0	33	206.0	1349	3.0	20		1.0	3.4		7.6	8.4	48.0
WEEK 4				51.6	0.692			203.5	1418	6.0	42	195.5	1365	4.5	31		1.0	3.7		7.7	8.3	46.0

Signature: _____
 Certification Number: 3989

City of Waverly

MONTHLY MONITORING REPORT

DISCHARGE SERIAL # 001

Date: March, 2014

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	RAW TEMP °F.	FLOW MGD	DIGESTER CONTENTS				CBOD 5 DAY 20 °C				TOTAL SUSPENDED SOLIDS				Settleable Solids FINAL mg/L	AMMONIA NITROGEN FINAL MG/L	FINAL LBS/DAY	RAW pH	FINAL pH	TEMP °F.
				TEMP °F.	ph	VOL. ACIDALKALIN MG/L	MG/L	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY	INF. MG/L	INF. LBS/DAY	EFF. MG/L	EFF. LBS/DAY						
1	Sat.		0.940																		
2	Sun.	48	0.800	95	6.35	330	2450								0.00			7.5	8.3	45	
3	Mon.	48	1.010	95	6.93										0.00			7.6	8.3	45	
4	Tues.	48	0.970	95	6.93			231	1869	6	49	244	1974	4	32	<0.50	0.00	7.5	8.3	46	
5	Wed.	48	0.970	95	6.93										0.00			7.5	8.3	46	
6	Thurs.	48	0.980	95	6.94			168	1429	4	34	252	2144	5	43	1.00	8.51	7.6	8.3	47	
7	Fri.	48	1.020	95	6.50										0.00						
8	Sat.		0.970																		
9	Sun.		1.040																		
10	Mon.	48	1.260	95	6.31	330	2400								0.00			7.6	8.3	46	
11	Tues.	48	1.280	95	6.51										0.00			7.6	8.3	46	
12	Wed.	48	1.080	95	6.50			150	1351	5	45	273	2459	5	45	1.00	9.01	7.5	8.2	46	
13	Thurs.	48	1.310	95	6.92										0.00			7.5	8.2	46	
14	Fri.	48	1.420	95	6.96	330	2350	123	1457	5	59	219	2594	3	36	1.00	11.84	7.5	8.2	46	
15	Sat.		1.060																		
16	Sun.		0.990																		
17	Mon.	48	1.080	94	6.31	323	2370								0.00			7.5	8.2	45	
18	Tues.	48	1.400	94	6.50										0.00			7.5	8.3	45	
19	Wed.	48	1.170	95	6.50			163	1591	5	49	223	2176	2	20	1.00	9.76	7.5	8.2	46	
20	Thurs.	48	1.250	95	6.31										0.00			7.5	8.2	46	
21	Fri.	48	1.290	95	6.89	300	2370	151	1625	4	43	214	2302	4	43	1.00	10.76	7.6	8.2	47	
22	Sat.		1.250																		
23	Sun.		1.300																		
24	Mon.	48	1.240	95	6.84	308	2390								0.00			7.6	8.2	47	
25	Tues.	48	1.290	95	6.85										0.00			7.5	8.3	47	
26	Wed.	48	1.060	95	6.84			174	1538	4	35	282	2493	3	27	1.00	8.84	7.6	8.2	48	
27	Thurs.	48	1.610	95	6.84										0.00			7.6	8.2	48	
28	Fri.	48	1.420	95	6.83	175	2260	181	2144	5	59	327	3873	4	47	1.00	11.84	7.5	8.2	48	
29	Sat.		1.470																		
30	Sun.		1.560																		
31	Mon.	48	1.630	95	6.85	285	2250								0.00			7.5	8.2	50	
TOTAL			37.110					1341.0	13002	38.0	373	2034.0	20014	30.0	292			7.0	70.6		
AVERAGE		48.0	1.197	94.9	6.9			167.6	1625	4.8	47	254.3	2502	3.8	36			1.0	8.8		
MAX		48.0	1.630	95.0	7.0			231.0	2144	6.0	59	327.0	3873	5.0	47			1.0	11.8	7.6	8.3
MIN		48.0	0.800	94.0	6.3			123.0	1351	4.0	34	214.0	1974	2.0	20			1.0	0.0	7.5	8.2
7 DAY AVERAGE																					
WEEK 1		48.0	0.956					199.5	1646	5.0	41	248.0	2059	4.5	37			1.0	4.3	7.5	8.3
WEEK 2		48.0	1.194					136.5	1404	5.0	52	246.0	2526	4.0	40			1.0	10.4	7.5	8.2
WEEK 3		48.0	1.177					157.0	1608	4.5	46	218.5	2239	3.0	31			1.0	10.3	7.5	8.2
WEEK 4		48.0	1.310					177.5	1841	4.5	47	304.5	3183	3.5	37			1.0	10.3	7.6	8.2

Signature: _____
 Certification Number: 3989

DAY OF MONTH	DAY OF WEEK	RAW TEMP.-F.	FLOW MGD	TEMP -F	DIGESTER CONTENTS			COD 5 DAY 20 °C			TOTAL SUSPENDED SOLIDS			Settleable Solids			AMMONIA NITROGEN			pH			TEMP-F
					VOL. ACIDALKALIN MG/L	MG/L	MG/L	INF. LBS/DAY	EFF. LBS/DAY	EFF. MG/L	INF. LBS/DAY	EFF. LBS/DAY	EFF. MG/L	INF. LBS/DAY	EFF. LBS/DAY	EFF. MG/L	FINAL EFFLUENT mg/L	FINAL MG/L	FINAL LBS/DAY	RAW	FINAL	RAW	
1	Thurs.	50	2.180	94	8.98				108	1862	5	88	168	2880	8	105	0.00	0.00	1.00	17.51	7.5	8.2	52
2	Fri.	50	2.100	94	7.00	315	2780														7.5	8.1	52
3	Sat.		1.920																				
4	Sun.		1.740																				
5	Mon.	53	1.820	94	6.99	315	2760														7.5	8.2	54
6	Tues.	53	1.540	94	6.99																7.5	8.2	55
7	Wed.	52	1.530	94	7.01				113	1489	4	53	210	2767	5	66	0.00	0.00	<0.50	0.00	7.5	8.2	55
8	Thurs.	53	1.450	96	7.00				177	2096	4	47	238	2700	5	59	0.00	0.00	1.00	11.84	7.5	8.2	55
9	Fri.	53	1.420	98	7.03	388	2800																
10	Sat.		1.140																				
11	Sun.		2.730																				
12	Mon.	53	3.120	98	7.10	380	2910														7.5	8.3	56
13	Tues.	53	2.090	96	7.10																7.5	8.2	56
14	Wed.	53	1.830	96	7.12				98	1496	8	122	159	2427	7	107	0.00	0.00	2.00	30.62	7.5	8.2	56
15	Thurs.	53	2.000	98	7.09																7.5	8.2	57
16	Fri.	53	1.770	96	7.13	518	3180		78	1151	5	74	150	2214	8	89	0.00	0.00	1.00	14.76	7.5	8.1	57
17	Sat.		1.670																				
18	Sun.		1.620																				
19	Mon.	52	1.590	96	7.11	495	3180														7.5	8.2	58
20	Tues.	52	1.690	97	7.10																7.8	8.1	58
21	Wed.	53	1.590	97	7.10				123	1600	5	65	174	2284	3	39	0.00	0.00	1.00	13.01	7.5	8.1	58
22	Thurs.	53	1.390	98	7.12																7.5	8.2	58
23	Fri.	53	1.310	96	7.12	383	3400		138	1488	5	55	200	2185	3	33	0.00	0.00	1.00	10.93	7.5	8.2	59
24	Sat.		1.290																				
25	Sun.		1.240																				
26	Mon.	54	1.280	96	7.13	390	3370														7.5	8.2	60
27	Tues.	54	1.360	96	7.12																7.8	8.2	60
28	Wed.	54	1.280	97	7.13				143	1503	7	74	179	1881	9	95	1.00	1.00	1.00	10.51	7.5	8.2	60
29	Thurs.	54	1.330	98	7.14																7.5	8.2	60
30	Fri.	54	1.160	97	7.14	458	3450		165	1588	10	97	223	2157	7	68	0.00	0.00	<0.50	0.00	7.4	8.2	60
31	Sat.		1.140																				
TOTAL			51,000						1141.0	14309	53.0	674	1892.0	21555	51.0	680			8.0	109.1			
AVERAGE			52.8	95.7	7.1				128.8	1590	5.9	75	188.0	2395	5.7	73			1.1	12.1			
MAX			54.0	97.0	7.1				177.0	2098	10.0	122	229.0	2960	9.0	107			2.0	30.5	7.6	8.3	60.0
MIN			50.0	94.0	7.0				78.0	1151	4.0	47	150.0	1881	3.0	33			1.0	0.0	7.4	8.1	52.0
7 DAY AVERAGE																							
WEEK 1			51.6	1.908					110.5	1890	4.5	70	189.5	2884	5.5	85			1.0	8.8	7.5	8.2	53.6
WEEK 2			52.2	1.970					137.5	1788	6.0	85	196.5	2563	6.0	83			1.5	21.2	7.5	8.2	55.8
WEEK 3			52.8	1.697					100.5	1376	5.0	69	167.0	2239	4.5	64			1.0	13.9	7.5	8.1	57.5
WEEK 4			53.6	1.301					139.5	1484	6.0	84	189.5	2033	6.0	64			1.0	10.7	7.5	8.2	59.4

Date: May, 2014

City of Waverly
MONTHLY MONITORING REPORT
DISCHARGE SERIAL # 001

Facility Number: 0890001

Note: 0.0 = <MDL of 0.6

Signature:
Certification Number: 3568

DEPARTMENT OF PUBLIC WORKS

STORM & SANITARY SEWER MAINTENANCE DIVISION

The Storm/Sanitary Sewer Maintenance Division was established in FY 90-91. Its function is to maintain the sewer systems and assist the Street, WPC, and Water Divisions as needed with major projects. Its purpose is two-fold: to establish an effective annual maintenance program to control long-term upkeep costs and to establish a more efficient operation of our sewer systems. This will utilize the budgeted money more efficiently, reduce waste water treatment costs, and upgrade instead of maintain our storm/sanitary sewers.

The following is a brief overview of some projects during FY '13-'14. This is not a total summary, but does give an idea of the versatility of this division and the expertise required. Several hundred feet of sanitary sewers were televised. Several problem areas are being scheduled for repair or replacement as time and funds become available.

FUTURE PROJECTS

1. Complete an inventory and inspection report of all sanitary and storm sewer structures and place into a computerized Storm/Sanitary Sewer Maintenance program.
2. Continue upgrade of existing sanitary manholes to decrease infiltration problems.
3. Continue work on storm sewer intakes and catch basins and replace old brick structures with poured concrete structures.
4. Continue televising of sewer lines to locate problem areas.
5. Continue cleaning and maintaining storm and sanitary sewer lines.

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 storm water collection system.

PUBLIC SERVICES

Line Maintenance

Year of : 2013-2014

<u>Wastewater Collection</u>	<u>Quantity</u>	<u>Storm Collection</u>	<u>Quantity</u>
Sewer Taps	ft.	Catch Basins Cleaned	70 ea.
Lines Flushed	<u>3,687</u> ft.	Lines Flushed	<u>255</u> ft.
 <u>Other Depts:</u>		 <u>Repair</u>	
Snow Plowing & Removal:	<u>126</u>	Catch Basins / Intakes	<u>37</u> ea.
Other Street Dept:	<u>25</u>	Manholes Raised	<u>29</u> ea.
Water Dept:	<u>255</u>		
WPC:	<u>3</u>	Water Consumed for	
Cemetery:	<u>17</u>	Jetting, Etc.	<u>45,750</u> gallons
Solid Waste:	<u>16</u>		
Building Maintenance:	<u>126</u>	Televising Lines:	<u>38</u> hours
Vehicle Maintenance:	<u>241</u>		
Mtgs/Inspections:	<u>150</u>		
Locates Done:	<u>94</u>		