

### *Highlights from Cheryl Porter, Chief Operating Officer – Water & Field Services*

The Wastewater Operations Area *Pumping (Lift) Stations* strategic initiatives include the following.

❖ **Maximize pumping reliability**

Regularly scheduled preventive maintenance is necessary and required to maintain the condition of all pumping (lift) stations.

❖ **Minimize energy usage**

Energy consumption is dependent on flow rate, total pressure, climate and overall pump efficiency. Energy can be minimized through proper preventive maintenance in order to maintain the condition of all pumping (lift) stations.

### **Biennial Budget Request**

The biennial budget reflects an overall decrease in FY 2022 of \$216,800. Key factors that impact the FY 2022 budget include the following.

❖ Energy consumption being directly proportional to the unit cost of power and the actual power used by the lift station pumps (increase of \$27,500).

❖ Contractual services decrease by \$34,300 based on updated estimate for as-needed expert opinion services.

❖ Annual maintenance costs vary, depending on the complexity of the equipment and instrumentation. New forecast in usage result in a decrease of \$211,300.

### *Biennial Budget Request by Expense Category*

Expense Category	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
3.1 Electric	\$ 2,148,000	\$ 2,109,500	\$ 841,472	\$ 2,137,000	\$ 27,500	1.3%	\$ 2,134,900
3.2 Gas	13,600	29,000	440	24,000	(5,000)	-17.2%	24,000
3.3 Sewage Service	8,700	10,500	1,632	9,000	(1,500)	-14.3%	9,000
3.4 Water Service	66,400	56,000	16,980	67,500	11,500	20.5%	67,500
4.2 Supplies & Other	698,700	897,500	533,379	686,200	(211,300)	-23.5%	686,200
4.3 Contractual Services	4,700	62,500	2,005	28,200	(34,300)	-54.9%	28,200
5.2 Shared Services	(554,400)	(180,800)	(45,201)	(184,500)	(3,700)	2.0%	(188,200)
<b>Grand Total</b>	<b>\$ 2,385,700</b>	<b>\$ 2,984,200</b>	<b>\$ 1,350,706</b>	<b>\$ 2,767,400</b>	<b>\$ (216,800)</b>	<b>-7.3%</b>	<b>\$ 2,761,600</b>

### Biennial Budget Request by Team

Team	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested
<b>Pumping Stations</b>							
- Wastewater Operations	\$ 2,385,700	\$ 2,984,200	\$ 1,350,706	\$ 2,767,400	\$ (216,800)	-7.3%	\$ 2,761,600
Detroit-owned							
Pumping Stations	(310,800)	188,700	5,820	121,900	(66,800)	-35.4%	118,200
Belle Isle Pumping Station	(138,900)	(6,000)	(8,208)	(8,800)	(2,800)	46.7%	(10,000)
Blue Hill Pumping Station	(67,000)	132,500	12,111	99,200	(33,300)	-25.1%	97,700
Fischer Pumping Station	(30,900)	(5,100)	(2,304)	300	5,400	-105.9%	100
Woodmere Pumping Station	(74,000)	67,300	4,221	31,200	(36,100)	-53.6%	30,400
Conner Pumping Station	645,200	870,000	195,003	725,000	(145,000)	-16.7%	725,000
Fairview Pumping Station	493,400	535,000	349,557	555,000	20,000	3.7%	555,000
Fox Creek Pumping Station	700	2,000	84	1,000	(1,000)	-50.0%	1,000
Freud Pumping Station	466,000	357,500	199,673	390,500	33,000	9.2%	390,500
Northeast Pumping Station	983,700	748,000	565,693	796,000	48,000	6.4%	793,900
Oakwood Pumping Station	107,500	283,000	34,876	178,000	(105,000)	-37.1%	178,000
<b>Grand Total</b>	<b>\$ 2,385,700</b>	<b>\$ 2,984,200</b>	<b>\$ 1,350,706</b>	<b>\$ 2,767,400</b>	<b>\$ (216,800)</b>	<b>-7.3%</b>	<b>\$ 2,761,600</b>

### Personnel Budget

Personnel budget is not a component of the Wastewater Operations Area Pumping (Lift) Stations.

### Five Year Financial Plan

#### Five-Year Financial Plan by Expense Category

Expense Category	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
3.1 Electric	\$ 2,109,500	\$ 841,472	\$ 2,137,000	\$ 27,500	1.3%	\$ 2,134,900	\$ 2,134,900	\$ 2,134,900	\$ 2,134,900
3.2 Gas	29,000	440	24,000	(5,000)	-17.2%	24,000	24,000	24,000	24,000
3.3 Sewage Service	10,500	1,632	9,000	(1,500)	-14.3%	9,000	9,000	9,000	9,000
3.4 Water Service	56,000	16,980	67,500	11,500	20.5%	67,500	67,500	67,500	67,500
4.2 Supplies & Other	897,500	533,379	686,200	(211,300)	-23.5%	686,200	686,200	686,200	686,200
4.3 Contractual Services	62,500	2,005	28,200	(34,300)	-54.9%	28,200	28,200	28,200	28,200
5.2 Shared Services	(180,800)	(45,201)	(184,500)	(3,700)	2.0%	(188,200)	(192,000)	(196,000)	(199,600)
<b>Grand Total</b>	<b>\$ 2,984,200</b>	<b>1,350,706</b>	<b>\$ 2,767,400</b>	<b>\$ (216,800)</b>	<b>-7.3%</b>	<b>\$ 2,761,600</b>	<b>\$ 2,757,800</b>	<b>\$ 2,753,800</b>	<b>\$ 2,750,200</b>

### ***Five-Year Financial Plan by Team***

Team	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2022 Dollar Variance	FY 2022 Percent Variance	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
<b>Detroit-owned</b>									
<b>Pumping Stations</b>	\$ 188,700	\$ 5,820	\$ 121,900	\$ (66,800)	-35.4%	\$ 118,200	\$ 114,400	\$ 110,400	\$ 106,800
Belle Isle Pumping Station	(6,000)	(8,208)	(8,800)	(2,800)	46.7%	(10,000)	(11,200)	(12,400)	(13,600)
Blue Hill Pumping Station	132,500	12,111	99,200	(33,300)	-25.1%	97,700	96,100	94,500	92,900
Fischer Pumping Station	(5,100)	(2,304)	300	5,400	-105.9%	100	(200)	(500)	(700)
Woodmere Pumping Station	67,300	4,221	31,200	(36,100)	-53.6%	30,400	29,700	28,800	28,200
<b>Conner Pumping Station</b>	<b>870,000</b>	<b>195,003</b>	<b>725,000</b>	<b>(145,000)</b>	<b>-16.7%</b>	<b>725,000</b>	<b>725,000</b>	<b>725,000</b>	<b>725,000</b>
<b>Fairview Pumping Station</b>	<b>535,000</b>	<b>349,557</b>	<b>555,000</b>	<b>20,000</b>	<b>3.7%</b>	<b>555,000</b>	<b>555,000</b>	<b>555,000</b>	<b>555,000</b>
<b>Fox Creek Pumping Station</b>	<b>2,000</b>	<b>84</b>	<b>1,000</b>	<b>(1,000)</b>	<b>-50.0%</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>
<b>Freud Pumping Station</b>	<b>357,500</b>	<b>199,673</b>	<b>390,500</b>	<b>33,000</b>	<b>9.2%</b>	<b>390,500</b>	<b>390,500</b>	<b>390,500</b>	<b>390,500</b>
<b>Northeast Pumping Station</b>	<b>748,000</b>	<b>565,693</b>	<b>796,000</b>	<b>48,000</b>	<b>6.4%</b>	<b>793,900</b>	<b>793,900</b>	<b>793,900</b>	<b>793,900</b>
<b>Oakwood Pumping Station</b>	<b>283,000</b>	<b>34,876</b>	<b>178,000</b>	<b>(105,000)</b>	<b>-37.1%</b>	<b>178,000</b>	<b>178,000</b>	<b>178,000</b>	<b>178,000</b>
<b>Grand Total</b>	<b>\$ 2,984,200</b>	<b>\$ 1,350,706</b>	<b>\$ 2,767,400</b>	<b>\$ (216,800)</b>	<b>-7.3%</b>	<b>\$ 2,761,600</b>	<b>\$ 2,757,800</b>	<b>\$ 2,753,800</b>	<b>\$ 2,750,200</b>

### **Capital Outlay**

Capital Outlay is not a component of the Wastewater Operations Area Pumping (Lift) Stations budget.

### **Line Item Budget and Financial Plan**

The five-year plan with a line item expense budget is reflected on the following page. The expenses are listed in custom grouping order by cost center.



# Wastewater Pump Stations Budget & Five-Year Plan FY 2022 through FY 2026

Cost Center & Expense Category	FY 2020 Actual	FY 2021 Adopted Budget	FY 2021 Activity as of 09.30.2020	FY 2022 Department Requested	FY 2023 Department Requested	FY 2024 Department Requested	FY 2025 Department Requested	FY 2026 Department Requested
<b>892342 - Belle Isle Pumping Station</b>	<b>(138,900)</b>	<b>(6,000)</b>	<b>(8,208)</b>	<b>(8,800)</b>	<b>(10,000)</b>	<b>(11,200)</b>	<b>(12,400)</b>	<b>(13,600)</b>
4.2 Supplies & Other	33,500	50,400	5,193	45,000	45,000	45,000	45,000	45,000
Repairs & Maintenance-Equipment	33,500	50,400	5,193	45,000	45,000	45,000	45,000	45,000
4.3 Contractual Services	500	-	702	3,700	3,700	3,700	3,700	3,700
Contractual Buildings & Grounds Maint	500	-	702	3,700	3,700	3,700	3,700	3,700
5.2 Shared Services	(172,900)	(56,400)	(14,104)	(57,500)	(58,700)	(59,900)	(61,100)	(62,300)
Shared Services Reimbursement	(172,900)	(56,400)	(14,104)	(57,500)	(58,700)	(59,900)	(61,100)	(62,300)
<b>892343 - Blue Hill Pumping Station</b>	<b>(67,000)</b>	<b>132,500</b>	<b>12,111</b>	<b>99,200</b>	<b>97,700</b>	<b>96,100</b>	<b>94,500</b>	<b>92,900</b>
4.2 Supplies & Other	164,100	208,000	30,635	173,000	173,000	173,000	173,000	173,000
Repairs & Maintenance-Equipment	164,100	208,000	30,635	173,000	173,000	173,000	173,000	173,000
4.3 Contractual Services	300	-	348	3,200	3,200	3,200	3,200	3,200
Contractual Buildings & Grounds Maint	300	-	348	3,200	3,200	3,200	3,200	3,200
5.2 Shared Services	(231,400)	(75,500)	(18,872)	(77,000)	(78,500)	(80,100)	(81,700)	(83,300)
Shared Services Reimbursement	(231,400)	(75,500)	(18,872)	(77,000)	(78,500)	(80,100)	(81,700)	(83,300)
<b>892345 - Conner Pumping Station</b>	<b>645,200</b>	<b>870,000</b>	<b>195,003</b>	<b>725,000</b>	<b>725,000</b>	<b>725,000</b>	<b>725,000</b>	<b>725,000</b>
3.1 Electric	460,400	600,000	135,877	500,000	500,000	500,000	500,000	500,000
3.2 Gas	1,100	2,000	116	2,000	2,000	2,000	2,000	2,000
3.3 Sewage Service	8,700	10,000	1,632	9,000	9,000	9,000	9,000	9,000
3.4 Water Service	38,800	36,000	9,775	39,000	39,000	39,000	39,000	39,000
4.2 Supplies & Other	134,200	207,000	47,604	170,000	170,000	170,000	170,000	170,000
Repairs & Maintenance-Equipment	134,200	207,000	47,604	170,000	170,000	170,000	170,000	170,000
4.3 Contractual Services	2,000	15,000	-	5,000	5,000	5,000	5,000	5,000
Contractual Professional Services	2,000	15,000	-	5,000	5,000	5,000	5,000	5,000
<b>892346 - Fairview Pumping Station</b>	<b>493,400</b>	<b>535,000</b>	<b>349,557</b>	<b>555,000</b>	<b>555,000</b>	<b>555,000</b>	<b>555,000</b>	<b>555,000</b>
3.1 Electric	404,300	450,000	338,858	450,000	450,000	450,000	450,000	450,000
3.2 Gas	500	15,000	116	10,000	10,000	10,000	10,000	10,000
3.4 Water Service	19,100	15,000	3,652	20,000	20,000	20,000	20,000	20,000
4.2 Supplies & Other	69,500	55,000	6,930	75,000	75,000	75,000	75,000	75,000
Repairs & Maintenance-Equipment	69,500	55,000	6,930	75,000	75,000	75,000	75,000	75,000
<b>892347 - Fischer Pumping Station</b>	<b>(30,900)</b>	<b>(5,100)</b>	<b>(2,304)</b>	<b>300</b>	<b>100</b>	<b>(200)</b>	<b>(500)</b>	<b>(700)</b>
4.2 Supplies & Other	6,200	7,100	207	7,200	7,200	7,200	7,200	7,200
Repairs & Maintenance-Equipment	6,200	7,100	207	7,200	7,200	7,200	7,200	7,200
4.3 Contractual Services	400	-	540	5,600	5,600	5,600	5,600	5,600
Contractual Buildings & Grounds Maint	400	-	540	5,600	5,600	5,600	5,600	5,600
5.2 Shared Services	(37,500)	(12,200)	(3,051)	(12,500)	(12,700)	(13,000)	(13,300)	(13,500)
Shared Services Reimbursement	(37,500)	(12,200)	(3,051)	(12,500)	(12,700)	(13,000)	(13,300)	(13,500)
<b>892348 - Fox Creek Pumping Station</b>	<b>700</b>	<b>2,000</b>	<b>84</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>
3.1 Electric	700	1,500	84	1,000	1,000	1,000	1,000	1,000
3.3 Sewage Service	-	500	-	-	-	-	-	-
<b>892349 - Freud Pumping Station</b>	<b>466,000</b>	<b>357,500</b>	<b>199,673</b>	<b>390,500</b>	<b>390,500</b>	<b>390,500</b>	<b>390,500</b>	<b>390,500</b>
3.1 Electric	369,200	190,000	81,672	275,000	275,000	275,000	275,000	275,000
3.2 Gas	12,000	12,000	207	12,000	12,000	12,000	12,000	12,000
3.4 Water Service	8,500	5,000	3,553	8,500	8,500	8,500	8,500	8,500
4.2 Supplies & Other	75,100	143,000	114,241	90,000	90,000	90,000	90,000	90,000
Repairs & Maintenance-Equipment	75,100	143,000	114,241	90,000	90,000	90,000	90,000	90,000
4.3 Contractual Services	1,200	7,500	-	5,000	5,000	5,000	5,000	5,000
Contractual Professional Services	1,200	7,500	-	5,000	5,000	5,000	5,000	5,000
<b>892350 - Northeast Pumping Station</b>	<b>983,700</b>	<b>748,000</b>	<b>565,693</b>	<b>796,000</b>	<b>793,900</b>	<b>793,900</b>	<b>793,900</b>	<b>793,900</b>
3.1 Electric	815,900	748,000	250,104	796,000	793,900	793,900	793,900	793,900
4.2 Supplies & Other	167,800	-	315,589	-	-	-	-	-
Repairs & Maintenance-Equipment	167,800	-	315,589	-	-	-	-	-
<b>892351 - Oakwood Pumping Station</b>	<b>107,500</b>	<b>283,000</b>	<b>34,876</b>	<b>178,000</b>	<b>178,000</b>	<b>178,000</b>	<b>178,000</b>	<b>178,000</b>
3.1 Electric	97,500	120,000	34,876	115,000	115,000	115,000	115,000	115,000
4.2 Supplies & Other	10,000	123,000	-	61,000	61,000	61,000	61,000	61,000
Repairs & Maintenance-Equipment	10,000	123,000	-	61,000	61,000	61,000	61,000	61,000
4.3 Contractual Services	-	40,000	-	2,000	2,000	2,000	2,000	2,000
Contractual Professional Services	-	40,000	-	2,000	2,000	2,000	2,000	2,000
<b>892352 - Woodmere Pumping Station</b>	<b>(74,000)</b>	<b>67,300</b>	<b>4,221</b>	<b>31,200</b>	<b>30,400</b>	<b>29,700</b>	<b>28,800</b>	<b>28,200</b>
4.2 Supplies & Other	38,300	104,000	12,980	65,000	65,000	65,000	65,000	65,000
Repairs & Maintenance-Equipment	38,300	104,000	12,980	65,000	65,000	65,000	65,000	65,000
4.3 Contractual Services	300	-	415	3,700	3,700	3,700	3,700	3,700
Contractual Buildings & Grounds Maint	300	-	415	3,700	3,700	3,700	3,700	3,700
5.2 Shared Services	(112,600)	(36,700)	(9,174)	(37,500)	(38,300)	(39,000)	(39,900)	(40,500)
Shared Services Reimbursement	(112,600)	(36,700)	(9,174)	(37,500)	(38,300)	(39,000)	(39,900)	(40,500)
<b>Grand Total</b>	<b>\$ 2,385,700</b>	<b>\$ 2,984,200</b>	<b>\$ 1,350,706</b>	<b>\$ 2,767,400</b>	<b>\$ 2,761,600</b>	<b>\$ 2,757,800</b>	<b>\$ 2,753,800</b>	<b>\$ 2,750,200</b>