

**City of Deephaven**  
**Five Year Utility Projections**  
**2023 - 2027**

**December 2022**

**Purpose**

The primary purpose in developing five-year projections for our Water, Sewer and Storm Water Funds is to determine if utility rates are adequate to fund both utility operations and capital projects that are planned over the next five years. In addition, utility projections are also beneficial in forecasting future operational costs, providing rate stability, establishing a schedule of necessary capital projects, and in providing a rationale to residents on the need for future rate adjustments.

**Summary, Projections &  
Recommendations**

**Water Fund**

***Summary***

The Deephaven Water Fund is very atypical of a municipal water fund in that it operates, for the most part, as a simple billing agency. Beginning in 1979, Water Service Agreements were established with the cities of Minnetonka and Shorewood to supply 114 Deephaven residents with public water service. Both cities bill Deephaven for the water usage incurred by these residents and Deephaven turns around and bills each resident the appropriate water usage fee plus a \$10.00 quarterly Administrative Fee and a \$20.00 quarterly Trunk Water Fee to cover Deephaven's operational and capital improvement costs. The implementation of these two latter fees has enabled the City to be able to fund both current and future water system operations and capital projects.

Since 2007, 35 additional customers have been added to the Deephaven water system with the development of Deephaven Cove and other minor water connections.

### ***Forecast***

- ◆ **Annual Expenditures** - Excluding capital projects, annual operating expenditures are expected to increase 2.0% per year from 2023 to 2027 primarily owing to annual 5% salary & benefit increases and a projected 2% annual water rate increase from the cities of Minnetonka and Shorewood.
- ◆ **Annual Revenues** - Annual revenues are expected to increase 2.2% per year from 2023 to 2027 due to the pass through of the anticipated water rate increases from Minnetonka and Shorewood and gradual increases in interest income due to an increasing fund balance.
- ◆ **Cash Reserves** - Water Fund cash reserves are projected to increase from \$264,375 at the end of 2022 to \$290,140 at the end of 2027. The increase in cash reserves is primarily due to the lack of significant capital projects over this time period.
- ◆ **Capital Projects** - Only one minor capital project is planned over the next five years - the repair and/or replacement of three (3) fire hydrants on Minnetonka Blvd in 2023.
- ◆ **Proposed Rate Increases** - The current Administrative Fee of \$10.00 per customer per quarter and the Trunk Water Charge of \$20.00 per customer per quarter should be adequate to fund all operational costs and system maintenance costs from 2023 to 2027.

### ***Recommendations***

1. A water rate increase will not be required from 2023 - 2027.
2. The current Administrative Fee and Trunk Water Charge are sufficient to finance all operational and maintenance costs of the Water Fund from 2023 - 2027.
3. The current Administrative Fee and Trunk Water Charge result in an average surplus of approximately \$5,903 per year to be used towards capital projects. This amount will not be nearly sufficient to finance the future replacement of the existing water main in the Pines, Minnetonka Blvd, along Carson's Bay Bridge, Ridgewood Road, Amesbury and Deephaven Cove. The full replacement of the existing water system requires an average surplus of approximately \$18,340 per year. Any future major improvement will likely require either an additional rate increase to support full main replacement or these project costs will have to be supported through special assessments.
4. An annual fund reserve of approximately \$250,000 should be sufficient to finance larger scale capital projects.

## Sewer Fund

### ***Summary***

The City was notified in 2015 that we exceeded our allotted flow and were required to participate in the Met Council's Inflow & Infiltration Mitigation Program. This program required the City to contribute \$249,000 over a four-year period from 2015-2018 towards I/I mitigation efforts. At the end of 2017, one-year earlier than required, the City met its commitment to contribute \$249,000 towards reducing inflow & infiltration into our sewer system. However, the Metropolitan Council continues to monitor the City's flow to ensure that the City is not contributing an excessive amount of I & I into their system.

Over the next five years, the three primary areas of concern are whether the City's I & I issues have been corrected or will excessive flow once again require the City to participate in the Metropolitan Council's I & I program. In order to address and improve the City's I & I, as well as to improve the overall sewer infrastructure, the capital improvement program for the Sewer Fund has been increased to include annual funding for the cleaning & television of sewer mains and the repair of force mains, installation of sewer main lining, and/or manhole improvements.

The second concern has been the rapidly increasing costs of the annual wastewater disposal charge. Since 2019, the Municipal Wastewater Charge has increased, on average, 4.4% per year. However, this does not preclude significant annual increases such as the 23.3% increase in 2016, the 11.7% increase in 2019, or the 10.1% increase in 2022. These increases are impossible to absorb with a flat sewer rate.

And finally, the increase in annual capital costs and projected increases in the annual wastewater disposal charge will require consideration of two rate increases in the next five years – one in 2024 and the other in 2026. These rate increases will enable the Sewer Fund to fund all annual operating costs, including wastewater disposal changes, and establish a more aggressive infrastructure improvement schedule. This will achieve the goal of continuing to rehabilitate our manholes, clean and televise our sewer mains, and rehabilitate sewer mains with the intent to substantially reduce the amount of inflow and infiltration into our system and reduce the possibility of any sewer main backups.

### ***Forecast***

- ◆ **Annual Expenditures** – Excluding capital projects, annual operating expenditures are expected to increase approximately 2.9% per year from 2023 to 2027 primarily owing to projected increases in salaries & benefits and waste disposal fees.
- ◆ **Annual Revenues** – Annual revenues are projected to increase 4.6% from 2023 to 2027 primarily owing to two rate increases in 2024 and 2026.
- ◆ **Cash Reserves** - Sewer Fund cash reserves are projected to increase from \$360,684 at the end of 2022 to \$611,287 at the end of 2027. The increase in cash reserves is due to the proposed rate increases in 2024 & 2026.

- ◆ **Capital Projects** - Capital projects from 2023 to 2027 are budgeted at \$160,000 per year - \$80,000 to do sewer main cleaning & televising in one-quarter of the City each year and \$80,000 for force main repair, sewer main lining and/or manhole repair. The only exception is in 2026 with the purchase of nine new lift station control panels in the amount of \$140,000.
- ◆ **Proposed Rate Increases** – There were two \$15.00 per quarter rate increases in 2024 and 2026 that propose to increase sewer revenue by \$99,120 per year. These two rate increases are proposed in order to support annual operating costs, projected annual 4.4% increases in waste disposal fees, and an annual capital improvement schedule of \$160,000 per year. Without these rate increases, the Sewer Fund would lose approximately \$198,000 per year.

### ***Recommendations***

1. With a fixed revenue stream, sewer rate increases from \$140.00 to \$155.00 per quarter in 2024 and another \$15.00 per quarter increase in 2026 from \$155.00 to \$170.00 per quarter will be required in order to support increasing wastewater disposal charges, operating costs, lift station upgrades, and the schedule of sewer infrastructure improvements planned from 2023 to 2027.
2. A regular schedule of sewer main cleaning & televising is recommended to properly maintain sewer mains, identify problem areas in the sewer system, and to help prevent sewer back-ups.
3. A force main repair, manhole repair, and main lining program is recommended to reduce inflow and infiltration into the sanitary sewer system.
4. Continue to initiate efforts over the next five years to substantially reduce inflow and infiltration into our system and to reduce the overall volume of our wastewater flow into the Metropolitan Council wastewater disposal system.
5. An annual fund reserve of approximately \$400,000 should be sufficient to provide a reliable stream of interest income, adequately maintain lift stations and repair damaged mains, and to provide for the reserves necessary to finance eventual sewer main replacement.

## Storm Water Fund

### *Summary*

The Storm Water Fund was originally established to provide funding for minor storm water control projects. Larger projects were funded through a combination of storm water fees, special assessments, and from the General Fund through the general tax levy. This has changed considerably over the past 15 years.

In 2006, the Storm Water Fund became the primary funding source for storm water projects when storm water fees were increased to \$5.00 per month per household to generate approximately \$88,260 per year in revenues. Over the course of the next 17 years, four additional rate increases have been implemented:

- 2014 - a second rate increase to \$7.00 per month per household was implemented to generate approximately \$123,564 per year in revenues as the schedule of storm water projects grew and to repay an interfund loan from the Sewer Fund that was used to finance the Rutledge Avenue Storm Water Project.
- 2020 - a third rate increase to \$8.50 per month was implemented to generate approximately \$151,164 per year in revenues.
- 2021 - a fourth rate increase to \$13.50 per month was implemented to generate approximately \$240,084 to finance an ever-increasing slate of storm water projects.
- 2023 – a fifth rate increase to \$18.00 per month has been proposed to generate approximately \$321,192 to finance the storm water infrastructure that is needed to augment the annual street resurfacing schedule.

### *Forecast*

- ◆ **Annual Expenditures** - Excluding capital projects, annual operating expenditures are expected to decrease \$29,043 from 2023 to 2027 due to the final payment on the \$150,000 loan from the General Fund in 2025.
- ◆ **Annual Revenues** - Annual revenues are expected to increase marginally from 2023 to 2027 due to gradual increases in interest income owing to increasing fund balances.
- ◆ **Cash Reserves** – Storm Water Fund cash reserves are projected to increase from \$9,696 at the end of 2022 to \$143,775 at the end of 2027. The increase in cash reserves is primarily owing to the fact that the cost of providing storm water improvements as part of the Street Resurfacing Program has not been determined at this time.
- ◆ **Capital Projects** – Significant capital projects totaling \$870,000 are planned from 2023 to 2027. As noted above, this total could fluctuate each year as future storm water projects are identified as part of the Street Resurfacing Program.
- ◆ **Proposed Rate Increases** – There is one \$4.50 per month rate increase proposed in 2023 that would increase storm water revenue by \$80,298 per year. This rate increase is proposed in order to increase depleted cash reserves owing to significant project costs the past two years and to address an increased capital improvement schedule of \$170,000 per year. Without this rate increase, the Storm Water Fund would lose approximately \$57,000 per year.

***Recommendations***

1. A \$4.50 per month rate increase is proposed in 2023.
2. Maintain and enhance the proposed capital improvement schedule in order to upgrade the aging storm water structures.
3. An annual fund reserve of approximately \$150,000 should be sufficient to finance larger scale capital projects.

**Water Fund Forecast  
2023 - 2027**

<b>Item</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Salary	4,050	4,253	4,465	4,688	4,923
Pera	304	319	335	352	369
Fica	251	264	277	291	305
Medicare	59	62	65	68	71
Insurance	1,152	1,210	1,270	1,334	1,400
Supplies	500	500	500	500	500
Auditing	2,500	2,563	2,627	2,692	2,760
Engineering	1,000	500	500	500	500
Postage	100	100	100	100	100
Insurance	1,600	1,648	1,697	1,748	1,801
Training Expenses	500	500	500	500	500
Utilities	95,000	96,900	98,838	100,815	102,831
Repair & Maint	3,500	3,600	3,700	3,800	3,900
Sales Tax	600	400	400	400	400
Capital Outlay	3,750	0	0	0	0
<b>Total Expense</b>	<b>114,866</b>	<b>112,817</b>	<b>115,274</b>	<b>117,788</b>	<b>120,360</b>
Revenues					
Permit Fees	100	100	100	100	100
Special Assessments	1,500	1,500	1,500	1,500	1,500
Interest Income	1,300	2,653	2,715	4,159	4,259
Charges for Service	112,880	114,780	116,718	118,695	120,711
<b>Total Revenue</b>	<b>115,780</b>	<b>119,033</b>	<b>121,033</b>	<b>124,454</b>	<b>126,570</b>
<b>Annual Balance</b>	<b>914</b>	<b>6,216</b>	<b>5,759</b>	<b>6,666</b>	<b>6,210</b>
<b>Cash Balance, Jan. 1st</b>	<b>264,375</b>	<b>265,289</b>	<b>271,505</b>	<b>277,264</b>	<b>283,931</b>
<b>Cash Balance, Dec. 31st</b>	<b>265,289</b>	<b>271,505</b>	<b>277,264</b>	<b>283,931</b>	<b>290,140</b>

**Notes:**

1. 2.5 hours in weekly staff hours budgeted each year.
2. The number of water utility customers is estimated at 149 per year.
3. 2% annual projected increases in Minnetonka & Shorewood water rates.
4. Replair of (3) fire hydrants on Minnetonka Blvd in 2023.
5. No rate increases are recommended over the next five years.

**Sewer Fund Forecast  
2023 - 2027**

<b>Item</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Salary	130,030	136,532	143,358	150,526	158,052
PERA	9,753	10,240	10,752	11,289	11,854
FICA	8,062	8,465	8,888	9,333	9,799
Medicare	1,886	1,980	2,079	2,183	2,292
Health Insurance	26,512	27,838	29,229	30,691	32,226
Supplies	2,600	2,800	2,800	3,000	3,000
Vehicle Maintenance	500	500	500	500	500
Repair & Maintenance	5,500	5,500	5,500	5,500	5,500
Auditing	6,400	6,560	6,724	6,892	7,064
Engineering	28,000	28,000	28,000	28,000	28,000
Disposal Fees	494,429	516,184	538,896	562,607	587,362
Computer Maintenance	3,400	3,400	3,500	3,500	3,500
Equipment Maintenance	24,000	24,000	24,000	24,000	24,000
Postage	1,400	1,400	1,400	1,400	1,400
Insurance	16,630	17,129	17,643	18,172	18,717
Training	800	800	800	800	800
Utilities	7,000	7,000	7,500	7,500	7,500
SAC Charges	2,485	2,485	2,485	2,485	2,485
Capital Projects	160,000	160,000	160,000	140,000	140,000
Miscellaneous	2,500	2,500	2,500	2,500	2,500
Transfer to Other Funds	39,288	39,288	39,288	39,288	39,288
<b>Total Expenses</b>	<b>971,175</b>	<b>1,002,599</b>	<b>1,035,842</b>	<b>1,050,166</b>	<b>1,085,839</b>
Revenues					
Charges for Service	930,120	1,024,240	1,024,240	1,123,360	1,123,360
SAC / Permit Fees	2,485	2,485	2,485	2,485	2,485
Permits	1,500	1,500	1,500	1,500	1,500
Special Assessments	31,000	24,000	24,000	24,000	24,000
Interest Income	1,803	3,564	4,096	6,451	8,066
<b>Total Revenue</b>	<b>966,908</b>	<b>1,055,789</b>	<b>1,056,321</b>	<b>1,157,796</b>	<b>1,159,411</b>
<b>Annual Balance</b>	<b>-4,267</b>	<b>53,190</b>	<b>20,479</b>	<b>107,630</b>	<b>73,571</b>
<b>Cash Balance, Jan. 1st</b>	<b>360,684</b>	<b>356,417</b>	<b>409,607</b>	<b>430,086</b>	<b>537,716</b>
<b>Cash Balance, Dec. 31st</b>	<b>356,417</b>	<b>409,607</b>	<b>430,086</b>	<b>537,716</b>	<b>611,287</b>

**Notes:**

1. Salaries include (1) FT public works, Administrator's salary (6 hrs/wk), Billing Clerk's salary (10 hrs/wk) and 370 hours/year in other public works salaries.
2. Capital Improvements include \$80,000 for cleaning / televising & \$80,000 for system improvements & Lift Station Control Panels (\$140,000) in 2026.
3. Waste disposal fee is estimated to increase at 4.4% per year.
4. There is a \$15.00 per quarter rate increase projected in 2024 & a \$15.00 per quarter rate increase 2026.

**Storm Water Fund Forecast  
2023 - 2027**

<b>Item</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Salaries	11,009	11,559	12,137	12,744	13,190
Pera	826	867	910	956	989
Fica	683	717	753	790	818
Medicare	160	168	176	185	191
Health Insurance	1,152	1,210	1,270	1,334	1,400
Supplies	500	500	500	500	500
Repair & Maint	500	500	500	500	500
Auditing	2,500	2,563	2,627	2,692	2,760
Engineering	72,000	72,000	72,000	72,000	72,000
Postage	200	200	200	200	200
Insurance	1,795	1,849	1,904	1,961	2,020
Contract Services	8,000	8,000	8,000	8,000	8,000
Dues & Subscriptions	530	530	530	530	530
Fund Transfer	32,287	32,287	32,287	0	0
Capital Projects	190,000	170,000	170,000	170,000	170,000
<b>Total Expense</b>	<b>322,142</b>	<b>302,949</b>	<b>303,794</b>	<b>272,392</b>	<b>273,099</b>
Revenues					
Storm Water Fees	321,192	321,192	321,192	321,192	321,192
Special Assessments	0	0	0	0	0
Fund Transfer	0	0	0	0	0
Interest Income	50	88	271	672	1,414
<b>Total Revenue</b>	<b>321,242</b>	<b>321,280</b>	<b>321,463</b>	<b>321,864</b>	<b>322,606</b>
<b>Annual Balance</b>	<b>-900</b>	<b>18,331</b>	<b>17,669</b>	<b>49,472</b>	<b>49,507</b>
<b>Cash Balance, Jan. 1st</b>	<b>9,696</b>	<b>8,796</b>	<b>27,127</b>	<b>44,796</b>	<b>94,268</b>
<b>Cash Balance, Dec. 31st</b>	<b>8,796</b>	<b>27,127</b>	<b>44,796</b>	<b>94,268</b>	<b>143,775</b>

**Notes:**

1. Salaries include 2 hrs/wk Administrator and 2.5 hrs/wk Billing Clerk.
2. There is one \$4.50 per month rate increase in 2023.
3. Major Capital Projects over the next five years include street stormwater repairs (\$140,000) & catch basin / culvert repairs (\$30,000)