SEWER IMPACT FEE ANAYLSIS

OCTOBER 2025

DRAFT

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CITY OF SARATOGA SPRINGS

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EXECUTIVE SUMMARY

INTRODUCTION

An impact fee is a one-time fee, not a tax, imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. The purpose of the impact fee analysis (IFA) is to calculate the allowable impact fee that may be assessed to new development in accordance with Utah Code.

WHY ASSESS AN IMPACT FEE?

Until new development utilizes the full capacity of existing facilities, the City can assess an impact fee to recover its cost of latent capacity available to serve future development. The general impact fee methodology divides the available capacity of existing and future capital projects between existing and future users. Capacity is measured in terms of Equivalent Residential Units, or ERUs, which represents the demand that a typical single-family residence places on the system.

HOW ARE IMPACT FEES CALCULATED?

A fair impact fee is calculated by dividing the cost of existing and future facilities by the amount of new growth that will benefit from the unused capacity. Only the capacity that is needed to serve the projected growth within in the next ten years is included in the fee. Costs used in the calculation of impact fees include:

- New facilities required to maintain (but not exceed) the proposed level of service identified in the Impact Fee Facilities Plan; only those expected to be built within ten years are considered in the final calculations of the impact fee.
- Historic costs of existing facilities that will serve new development
- Cost of professional services for engineering, planning, and preparation of the Impact Fee Facilities Plan and Impact Fee Analysis

Costs not used in the impact fee calculation:

- Operational and maintenance costs
- Cost of facilities constructed beyond 10 years
- Cost associated with capacity not expected to be used within 10 years
- Cost of facilities funded by grants, developer contributions, or other funds which the City is not required to repay
- Cost of renovating or reconstructing facilities which do not provide new capacity or needed enhancement of services to serve future development

IMPACT FEE CALCULATION

Impact fees for this analysis were calculated by dividing the proportional cost of facilities required to service 10-year growth by the amount of growth expected over the next 10-years based on ERUs. Calculated impact fees by component are summarized in Table ES-1.

Table ES-1
Impact Fee Calculation per ERU

System Components	Area Cost of Component	% Serving 10-Year Growth	Cost Serving 10-Year Growth	10-Year ERUs Served	Cost per ERU
Conveyance Improvements					
Existing Facilities	$48,406,377	28.5%	$13,775,921	12,889	$1,069
Existing Facility Financing Costs	$3,860,019	30.6%	$1,182,558	12,889	$92
10-year Projects	$14,910,328	27.4%	$4,082,930	12,889	$317
10-Year Project Financing Costs	$0	0.0%	$0	12,889	$0
Subtotals	*$67,176,723*		*$19,041,409*		$1,477
Professional Services					
Planning and Engineering	$118,199	66.6%	$78,719	6,445	$12
Subtotals	$118,199		$78,719		$12
Totals	**$67,294,922**		**$19,120,129**		**$1,490**

Per Table ES-1, the calculated impact fee for sewer in Saratoga Springs is $1,490/ERU. This is the legal maximum amount that may be charged as an impact fee. A lower amount may be adopted if desired, but a higher fee is not allowable under the requirements of Utah Code. This is separate from any special assessments associated with reimbursement agreements for project level improvements (if applicable) and the impact fee for wastewater conveyance and treatment charged by Timpanogos Special Service District.

IMPACT FEE ANALYSIS

INTRODUCTION

Saratoga Springs City has retained Bowen Collins & Associates (BC&A) to prepare an impact fee analysis (IFA) for its sewer system based on a recently completed impact fee facilities plan. An impact fee is a one-time fee, not a tax, imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. The purpose of an IFA is to calculate the allowable impact fee that may be assessed to new development in accordance with Utah Code.

SERVICE AREA

For the purpose of impact fee calculations, the City sewer system will continue to be treated as a single service area.

REQUIREMENTS

Requirements for the preparation of an IFA are outlined in Title 11, Chapter 36a of the Utah Code (the Impact Fees Act). Under these requirements, an IFA shall accomplish the following for each facility:

1. Identify the impact of anticipated development activity on existing capacity
2. Identify the impact of anticipated development activity on system improvements required to maintain the established level of service
3. Demonstrate how the impacts are reasonably related to anticipated development activity
4. Estimate the proportionate share of:
    a. Costs of existing capacity that will be recouped
    b. Costs of impacts on system improvements that are reasonably related to the new development activity
5. Identify how the impact fee was calculated
6. Consider the following additional issues
    a. Manner of financing improvements
    b. Dedication of system improvements
    c. Extraordinary costs in servicing newly developed properties
    d. Time-price differential

The following sections of this report have been organized to address each of these requirements.

IMPACT ON SYSTEM - 11-36A-304(1)(A)(B)

Growth within the City's service area, and projections of sewer flows resulting from said growth is discussed in detail in the City's Impact Fee Facilities Plan. For the purposes of impact fee calculation, growth in the system has been expressed in terms of equivalent residential units (ERUs). An ERU represents the demand that a typical single-family residence places on the system. Growth in ERUs projected for the service area is summarized in Table 1.

Table 1
Projected Saratoga Springs Sewer System Growth – Flow ERUs

Year	Total Projected ERUs	Estimated Average Daily Sewer Production (MGD)	Estimated Peak Hour Sewer Production (MGD)
2024	15,576	3.72	7.41
2025	16,751	4.00	7.97
2026	17,965	4.29	8.55
2027	19,230	4.60	9.15
2028	20,546	4.91	9.78
2029	21,912	5.24	10.43
2030	23,324	5.57	11.10
2031	24,780	5.92	11.79
2032	26,278	6.28	12.51
2033	27,840	6.65	13.25
2034	28,465	6.80	13.55

As indicated in the table, projected growth for the 10-year planning window of this impact fee analysis is 12,889 ERUs. In order to maintain the established level of service, projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities. Use of excess capacity and required system improvements are detailed in the Impact Fee Facilities Plan.

RELATION OF IMPACTS TO ANTICIPATED DEVELOPMENT - 11-36A-304(1)(C)

To satisfy the requirements of state law, it is necessary to show that all impacts identified in the impact fee analysis are reasonably related to the anticipated development activity. This has been documented in detail in Impact Fee Facilities Plan. In short, only that capacity directly associated with demand placed upon existing system facilities by future development has been identified as an impact of the development. The steps completed to identify the impacts of anticipated development are as follows.

1. **Existing Demand** – The demand existing development places on the system was estimated based on historic demand records.
2. **Existing Capacity** – The capacities of existing facilities were calculated based on the level of service criteria established for each type of facility in the Impact Fee Facilities Plan.
3. **Existing Deficiencies** – Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities. If existing deficiencies exist, projects were identified to eliminate the deficiencies. Costs associated with existing deficiencies were not assigned to impacts of development.
4. **Future Demand** - The demand future development will place on the system was estimated based on development projections as discussed in the Impact Fee Facilities Plan.

5. **Future Demand Use of Existing Capacity** – Whenever possible, excess capacity in existing facilities has been used to serve future demands. Where this occurs, the amount of capacity used by future growth has been calculated as described in detail in the Impact Fee Facilities Plan.
6. **Future Deficiencies** – Where excess capacity is inadequate to meet projected demands, future deficiencies in the system were identified using the same established level of service criteria used for existing demands.
7. **Recommended Improvements** – Needed system improvements were identified to meet demands associated with future development.

PROPORTIONATE SHARE ANALYSIS - 11-36A-304(1)(D)

A comprehensive proportionate share analysis associated with anticipated future development and its impact on the system was completed as part of the Impact Fee Facilities Plan. A summary of that analysis is contained here with additional discussion of the costs of facilities impacted by growth.

EXCESS CAPACITY TO ACCOMMODATE FUTURE GROWTH

The amount of existing capacity used by existing users, growth during the 10-year planning window, and growth beyond the 10 year planning window was analyzed in detail as part of the Impact Fee Facilities Plan. Based on the analysis, the calculated cost of excess capacity in existing system facilities used by growth in the planning window is summarized in Table 2.

Table 2
Existing Facility Capacity Used by Future Growth

Project ID	Project Name	System Level Cost	Percent Attributable to Existing Users	Percent Attributable to 10-yr Growth	Percent Attributable to Growth Beyond 10-years
Inlet Park	Original Inlet Park Construction (includes settlement agreements)	$1,141,967	82%	18%	0%
L11a	Lift Station 11 Land Acquisition	$100,000	5%	33%	63%
L9	Northshore Lift Station	$1,450,050	0%	63%	37%
M5	Sewer Manhole Lining	$516,167	25%	21%	54%
N1a	Redwood Road Sewer Line from Pioneer Crossing to Approx 830 North	$1,463,912	30%	33%	37%
N1b	North Trunk – Redwood Rd and Pioneer Xing to Riverside Drive	$4,192,569	34%	27%	40%
N1c	Conveyance from Riverside Drive to N1D	$4,870,463	35%	29%	35%
N1d	Redwood Road to Jordan River	$3,802,429	12%	14%	74%
N1f	Interconnection from Existing to new gravity	$69,000	44%	21%	35%
N1g	The Crossings Sewer Upsize	$189,111	3%	26%	72%
N2	Exchange Drive to Project N1 (no redwood Rd. trunkline replacement; new line to parallel existing line)	$538,496	9%	42%	49%
N3a	Sewer Line Near Tractor Supply	$1,016,175	13%	46%	41%
N3b	New SR 73 Trunk from Springs/Wildflower to Tractor Supply	$1,180,000	13%	49%	38%
N3c	Wildflower Sewer Conveyance to City system	$2,095,728	17%	70%	13%
N5	Wildflower Sewer Conveyance to City system	$1,376,895	26%	43%	30%
N6	Fairfield Road Sewer Line	$0	43%	32%	24%
N7a	Willow Glen Sewer	$212,876	69%	31%	0%
N8a	Sewer Outfall At Perelle Meadows	$133,676	26%	66%	8%
N8b	Northlake Meadows Trunk	$22,829	13%	41%	46%
N8c	Perelle Meadows Trunk and Tie-In	$136,247	26%	66%	8%
S0.1	Ironwood Realign Sewer Main	$96,066	83%	5%	12%
S1.2	River Crossing Trunk (Suspended)	$2,149,846	24%	27%	49%
S1.3	River Crossing Trunk – Outfall	$5,016,308	24%	27%	49%
S2.1a	School House Road Sewer Line	$608,142	99%	0%	1%
S2.2a	Lakeside Phase 1 Sewer Upsize	$64,743	30%	70%	0%
S2.2b	Inlet Park Trunk – Phase 2, Golf Course Main	$2,623,375	8%	42%	50%

Project ID	Project Name	System Level Cost	Percent Attributable to Existing Users	Percent Attributable to 10-yr Growth	Percent Attributable to Growth Beyond 10-years
S3	New E/W Trunk N of Beacon Point	$851,131	1%	9%	91%
S4.1a	Parkway Blvd Crossing at Redwood Road	$287,431	43%	24%	33%
S4.1b	Redwood Road to Gravity Outfall	$3,068,862	10%	16%	74%
S4.2a	Redwood Road Gravity Extension – Parkway Blvd to Grandview Blvd (Replace Existing)	$2,107,830	44%	23%	33%
S4.2b, S4.3	Grandview to Ring Road	$2,881,116	43%	22%	35%
S5a	Foothill BLVD Trunk part A	$1,124,659	2%	9%	89%
S6a	New E/W Trunk N of Tickville	$2,147,000	1%	4%	94%
SAR.104	Smith's Sewer Outfall	$350,778	56%	33%	11%
SAR.126	Inlet Park Lift Station Upgrade Project	$144,748	82%	18%	0%
SAR.131	Upper Sewer Extension - Benches Portion	$40,600	70%	17%	13%
SAR.162A, B, C	Harbor Bay Lift Station 7 and Outfall (Separate from Reimbursement Assessment)	$93,856	50%	42%	7%
SAR.207	Lift Station Upgrade at Harbor Bay Park (Lift 7)	$241,297	50%	42%	7%
Total or Average		**$48,406,377**	**30%**	**28%**	**46%**

Note: The previously completed projects shown above only includes those with excess capacity to serve future growth over the next 10 years. Other City facilities without excess capacity or facilities that were built without cost to the City are not shown.

Included in the table is the actual construction costs of existing components of the City's wastewater system. These are not depreciated replacement costs, but the actual cost at the time of construction.

In this study, public facility costs already incurred by the City will be included in the impact fee only to the extent that new growth will be served by the previously constructed improvements.

FUTURE IMPROVEMENTS

In addition to using available existing capacity, demand associated with projected future development will be met through the construction of additional capacity in new facilities. A primary focus of the Impact Fee Facilities Plan was the identification of projects required to serve new development. The results of the Impact Fee Facilities Plan are summarized in Table 3. Included in the table are the costs of each required project and the portion of costs associated with development in the planning window. All cost estimates contained in this IFA have been taken directly from the IFFP. The basis of these estimates is documented in the IFFP.

Table 3
Impact Fee Eligible Capital Projects

Project ID	Project Name	Total Construction Cost	Percent Attributable to Existing Users	Percent Attributable to Growth (2024-2034)	Percent Attributable to Growth (2034 +)
L11b	Fairway BLVD Lift Station (Lift 11)	$7,200,230	5%	33%	62%
N1e	Reroute Posey Lift Station (Lift 2) Force Main	$571,650	23%	19%	57%
N9b	West North Shore Collector (Upsize)	$119,405	0%	8%	92%
S2.6	Redwood Rd Replacement N of Wildlife & S of Silver Fox	$2,380,000	6%	30%	65%
S2.7	Redwood Rd Replacement from Lake Mnt Dr to Wildlife Blvd	$1,266,900	6%	43%	52%
S5b	Foothill BLVD Trunk to Mid Point of City (Upsize)	$3,372,142	0%	11%	89%
Total or Average		**$14,910,328**	**5%**	**27%**	**68%**

IMPACT FEE CALCULATION - 11-36A-304(1)(E)

Using the information contained in the previous sections, impact fees can be calculated by dividing the proportional cost of facilities required to service 10-year growth by the amount of growth expected over the next 10-years. Calculated impact fees by component are summarized in Table 4.

Table 4
Impact Fee Calculation per ERU

System Components	Area Cost of Component	% Serving 10-Year Growth	Cost Serving 10-Year Growth	10-Year ERUs Served	Cost per ERU
Conveyance Improvements					
Existing Facilities	$48,406,377	28.5%	$13,775,921	12,889	$1,069
Existing Facility Financing Costs	$3,860,019	30.6%	$1,182,558	12,889	$92
10-year Projects	$14,910,328	27.4%	$4,082,930	12,889	$317
10-Year Project Financing Costs	$0	0.0%	$0	12,889	$0
Subtotals	*$67,176,723*		*$19,041,409*		*$1,477*
Professional Services					
Planning and Engineering	$118,199	66.6%	$78,719	6,445	$12
Subtotals	*$118,199*		*$78,719*		*$12*
Totals	**$67,294,922**		**$19,120,129**		**$1,490**

BONDING INTEREST COSTS

In addition to construction costs, Table 4 includes the cost of bond interest expense where applicable. This could include any interest costs on existing facilities where new growth will benefit from excess capacity and future interest costs for bonds required to build projects needed for growth as identified in the Impact Fee Facilities Plan. In the case of the Saratoga Springs City wastewater system, there is one outstanding bond, the 2018 revenue bond. The principal borrowed under this loan was $9,970,000 with interest costs of $4,126,080. The proceeds from this bond were used for the construction of several new gravity trunk lines. Interest associated with this loan has been calculated based on the actual bond amortization schedule. The bond has an average interest rate of 3.25% and a payback period of 20 years. Like project construction costs, only that portion of interest expense associated with capacity for growth is included in the impact fee calculation.

PLANNING AND ENGINEERING COSTS

Utah Code allows for the cost of planning and engineering associated with impact fee calculations to be recovered as part of an impact fee. The cost of applicable studies completed by the City directly associated with planning for future growth have been included in Table 4. Only the actual costs, incurred by the City, related to planning and engineering for new growth have been included in this document. No future costs or projections have been added.

Included in the table is the calculated portion of the studies dedicated to planning for future growth (based on hours spent) and the number of ERUs served during the expected useful life of the planning documents (five years).

CREDIT FOR USER FEES

In some cases, an impact fee facility plan may include some portion of bonding being used for projects that have at least a portion of their costs that benefit existing users. For projects where this is the case, future users will pay for their portion of capacity via impact fees. They cannot also be expected to pay through user rates the portion of future bonds that will be used to build capacity or remedy deficiencies for existing users. This creates the need for a credit for future users.

This is not the case for Saratoga Springs. In recent years, several projects were partially funded by the 2018 revenue bond. However, the portion of these projects not funded by the bond was paid for from existing cash reserves. The amount paid from cash reserves exceeded the liability existing users had relative to addressing existing deficiencies. Thus, the bond proceeds have been used exclusively for building capacity for future users. Because no portion of the bond payments will be used to benefit existing users, there is no need to create a credit in the impact fee for future users.

RECOMMENDED IMPACT FEE

Per Table 4, the calculated impact fee for sewer in Saratoga Springs is $1,489.55/ERU. This is the legal maximum amount that may be charged as an impact fee. A lower amount may be adopted if desired, but a higher fee is not allowable under the requirements of Utah Code. This is separate from any additional charges levied by the City for hookup costs or for other reasonable permit and application fees.

CALCULATION OF IMPACT FEES FOR NON-RESIDENTIAL DEVELOPMENT

The calculations above have been based on an equivalent residential unit (ERU). For non-residential development and residential development that does not meet the definition of an ERU, the City will assign an ERU equivalency based on water service size, consistent with the water impact fee. Calculations for one ERU have been based on a standard ¾" water service size. Larger water services are assumed to serve more than 1 ERU and will have a higher corresponding impact fee. Table 5 and indicates the impact fee rate schedule based on water service size for the sewer impact fees. The ERU factor is calculated based on the American Water Works Association (AWWA) rated capacity for a meter matching the identified service size.

Table 5
Sewer Impact Fee Based on Water Service Size

Water Service Size	ERU	Impact Fee
¾"	1	$1,489.55
1"	1.67	$2,487.55
1 ½"	3.33	$4,960.21
2"	5.33	$7,939.32
3"	10	$14,895.53
4"	16.67	$24,830.85
6"	33.33	$49,646.80
8"	53.33	$79,437.86

ADDITIONAL CONSIDERATIONS - 11-36A-304(2)

MANNER OF FINANCING - 11-36A-304(2)(A-E)

As part of this Impact Fee Analysis, it is important to consider how each facility has been or will be paid for. Potential infrastructure funding includes a combination of different revenue sources.

User Charges

Because infrastructure must generally be built ahead of growth, there often arises situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. Interfund loans should be considered in subsequent accounting of impact fee expenditures.

Bonds

None of the costs contained in the IFFP included bonding. Where City financial plans identify bonding will be required to finance impact fee eligible improvements, the portion of bond cost and interest expense attributable to future growth has been added to the calculation of the impact fee.

General Taxes

If taxes are used to pay for infrastructure, they should be accounted for in the impact fee calculation. Specifically, any contribution made by property owners through taxes should be credited toward their available capacity in the system. In this case, no taxes are proposed for the construction of infrastructure.

Federal and State Grants and Donations

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the City has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If grants become available for constructing facilities, impact fees will need to be recalculated and an appropriate credit given. Any existing infrastructure funded through past grants has been removed from the system cost.

Timpanogos Special Service District

It should be emphasized that the impact fees calculated as part of this analysis are for facilities owned and operated by Saratoga Springs City only. Wastewater for City residents also requires the use of capacity in conveyance and treatment facilities owned and operated by Timpanogos Special Service District (TSSD). TSSD has adopted its own impact fee that is separate and in addition to the impact fee calculated here.

DEDICATION OF SYSTEM IMPROVEMENTS - 11-36A-304(2)(F)

Developer exactions are not the same as grants. As identified in the IFFP, if a developer constructs a system improvement or dedicates land for a system improvement identified in the IFFP, or dedicates a public facility that is recognized to reduce the need for a system improvement, the developer may be entitled to an appropriate credit against that particular developer's impact fee liability or a proportionate reimbursement.

If the value of the credit is less than the development's impact fee liability, the developer will owe the balance of the liability to the City. If the recognized value of the improvements/land dedicated is more than the development's impact fee liability, the City may be required to reimburse the difference to the developer.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. Developers will be responsible for the construction of project improvements (i.e. improvements not identified in the impact fee facilities plan) without credit against the impact fee.

EXTRAORDINARY COSTS - 11-36A-304(2)(G)

The Impact Fees Act indicates the analysis should include consideration of any extraordinary costs of servicing newly developed properties. In cases where one area of potential growth may cost significantly more to service than other growth, a separate service area may be warranted. No areas with extraordinary costs have been identified as part of this analysis.

TIME-PRICE DIFFERENTIAL - 11-36A-304(2)(H)

Utah Code allows consideration of time-price differential in order to create fairness for amounts paid at different times. To address time-price differential, this analysis includes a conversion to present value cost for future expenditures. In the case of future construction costs, it has been assumed that the return rate on investment will be roughly equivalent to construction inflation and current construction estimates have been used in the calculation of impact fees. Per the requirements of the Code, existing infrastructure cost, if any, is based on actual historical costs without adjustment.

IMPACT FEE CERTIFICATION - UTAH CODE ANNOTATED 11-36A-306(2)

This impact fee analysis has been prepared in accordance with Utah Code Title 11 Chapter 36a (the "Impact Fees Act"), which prescribes the laws pertaining to the imposition of impact fees in Utah. The accuracy of this report relies upon the planning, engineering, and other source data, which was provided by the City and their designees.

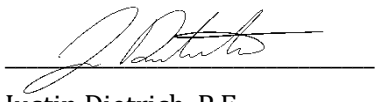
In accordance with Utah Code Annotated, 11-36a-306(2), Bowen Collins & Associates, makes the following certification:

I certify that this impact fee facility plan:

1. Includes only the cost of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. Does not include:
    a. costs of operation and maintenance of public facilities; or
    b. cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
3. Offsets costs with grants or other alternat sources of payment; and
4. Complies in each relevant respect with the Impact Fees Act.

This certification is made with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plan (IFFP) made in the IFFP or in the impact fee analysis are followed in their entirety by the City.
2. If all or a portion of the IFFP or impact fee analysis is modified or amended, this certification is no longer valid.
3. All information provided in the preparation of this IFFP is assumed to be correct, complete and accurate. This includes information provided by the City and outside sources.



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