SEWER IMPACT FEE FACILITIES PLAN

OCTOBER 2025

DRAFT

Prepared for:

CITY OF SARATOGA SPRINGS

Prepared by:

BOWEN COLLINS & ASSOCIATES

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

EXECUTIVE SUMMARY

INTRODUCTION

The City of Saratoga Springs has retained Bowen Collins & Associates (BC&A) to prepare an impact fee facility plan (IFFP) for the sanitary sewer utility. The purpose of an IFFP is to identify demands placed upon City facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which may be funded through impact fees.

This document is the updated IFFP corresponding to the 2025 sanitary sewer master plan. Reference documents to this IFFP include:

- Saratoga Springs Sewer Master Plan (September 2025)

WHY IS AN IFFP NEEDED?

The IFFP provides a technical basis for assessing updated impact fees throughout the City. This document will address the future infrastructure needed to serve the City with regard to current land use planning. The existing and future capital projects documented in this IFFP will ensure that level of service standards are maintained for all existing and future residents who reside within the City. Local governments must pay strict attention to the required elements of the Impact Fee Facilities Plan which are enumerated in the Impact Fees Act (Title 22 Chapter 36a of the Utah Code Annotated).

PROJECTED FUTURE GROWTH

To evaluate the use of existing capacity and the need for future capacity, it is first necessary to calculate the demand associated with existing development and projected growth. Using available information for existing development and growth projections from the City's new Capital Facilities Plan (CFP), projected growth in system demand is summarized in Table ES-1 in terms of Equivalent Residential Units (ERUs). An ERU represents the demand that a typical single-family residence places on the system.

Table ES-1
City Growth Projections

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 shown in the table above, the growth expected within the 10-year planning window is 12,889 ERUs. These growth projections are presented in greater detail in a growth memorandum prepared by Zions Bank Public Finance that has been attached as an appendix to the CFP.

EXISTING CAPACITY AVAILABLE TO SERVE FUTURE GROWTH

Projected future growth will be met through a combination of utilizing available excess capacity in existing facilities and the construction of additional capacity in new facilities. The calculated percentage of existing capacity available for use by future growth in facilities constructed by the city is summarized in Table ES-2 (at the end of this section).

REQUIRED SYSTEM IMPROVEMENTS

Beyond available existing capacity, additional improvements required to serve new growth are summarized in Table ES-3 (at the end of this section).

To satisfy the requirements of state law, Table ES-3 provides a breakdown of the percentage of the project costs attributed to existing and future users. For future use, capacity has been divided between capacity to be used by growth within the 10-year planning window of this IFFP and capacity that will be available for growth beyond the 10-year window.

Table ES-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%
S3	New E/W Trunk N of Beacon Point	$851,131	1%	9%	91%

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
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 include 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.

Table ES-3
Proposed Facility Capacity Used by Future Growth

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 FACILITIES PLAN

INTRODUCTION

The City of Saratoga Springs has retained Bowen Collins & Associates (BC&A) to prepare an impact fee facility plan (IFFP) for sanitary sewer services provided by the City. The purpose of an IFFP is to determine the public facilities required to serve development resulting from new development activity. The IFFP is also intended to outline the improvements which may be funded through impact fees.

Much of the analysis forming the basis of this IFFP has been taken from the City's 2025 Sanitary Sewer Capital Facilities Plan (CFP), which was also prepared by BC&A. The reader should refer to the CFP for additional discussion of planning and evaluation methodology beyond what is contained in this IFFP.

SERVICE AREA

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

IMPACT FEE FACILITY PLAN COMPONENTS

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

1. Identify the existing level of service
2. Establish a proposed level of service
3. Identify excess capacity to accommodate future growth at the proposed level of service
4. Identify demands placed upon existing public facilities by new development
5. Identify the means by which demands from new development will be met
6. Consider the following additional issues
    a. revenue sources to finance required system improvements
    b. necessity of improvements to maintain the proposed level of service
    c. need for facilities relative to planned locations of schools

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

EXISTING LEVEL OF SERVICE - UTAH CODE ANNOTATED 11-36A-302(1)(A)(I)

Level of service is defined in the Impact Fees Act as "the defined performance standard or unit of demand for each capital component of a public facility within a service area". This section discusses the level of service currently being provided to existing users.

Performance Standard

The performance standard defines the level of service the City has established to satisfy City and/or State performance requirements. Every city desires to provide sanitary sewer capacity for its residents and businesses and to balance the cost of sanitary sewer improvements with the amount of flow in the system. Thus, the performance standard as documented in the City's CFP is based on

the City's 2025 Engineering Standards and Specifications. The level of service adopted by The City of Saratoga Springs is similar to the level of service provided by neighboring cities.

Sewer Main Level of Service

Saratoga Springs Engineering Standards and Specifications (last updated in January 2025) require all sewer pipes be designed such that the peak daily flow in the pipe is less than or equal to 80 percent of the pipe's full flow capacity. This design standard is used as the level of service for this analysis. Note that the capacity of a pipe at 80 percent full (peak flow to full flow capacity) is nearly equal to the capacity of the pipe (depth to diameter) at 68 percent of full depth.

Force Main Level of Service

Good practice for force main design requires that lift station force mains have a peak velocity that does not exceed 7 feet per second. By eliminating excessive pipeline velocities, this standard optimizes pump efficiency, limits potential for hydraulic surge issues, and maximizes the life of the force main. It is also required that the maximum distance between clean outs along the pipeline is no greater than 1,200 feet. This is to facilitate cleaning of the force mains using the City's jet truck equipment which has a max reach of approximately 600 feet. The full extent of the City's requirements regarding force mains can be found on the City's website.

Lift Station Level of Service

Based on industry standards and good design practice, it is recommended that peak daily flow to a lift station not exceed 85 percent of the lift station's hydraulic pumping capacity (not counting the required standby pump). Allowing for a modest amount of capacity above projected flows accounts for unknowns associated with flow projections and mechanical wear at each lift station. The standby pump provides an additional small amount of capacity buffer. The minimum design level of service for lift stations has correspondingly been established such that the buildout flows do not exceed 85% of the lift station's capacity.

The minimum wet well volume for lift stations should be large enough to prevent excessive cycling of lift station pumps. Based on manufacturer recommendations for pump operation, the maximum number of cycles per hour should be six or less. Exceeding this value will significantly shorten the lifespan of the lift station pumps.

Unit of Demand

The projected flow used to design and evaluate system components will vary depending on the nature of each component. For example, most water reclamation facility processes are designed based on average day, maximum month flow. Conversely, conveyance pipelines must be designed based on peak hour flow (function of daily flow and diurnal flow variation).

For the purposes of this analysis, it is useful to define these various demands in terms of Equivalent Residential Units (ERUs). An ERU represents the demand that a typical single-family residence places on the system. As discussed at length in Chapters 3 and 4 of the CFP, metered flow data was combined with the expected number of ERUs in the City to establish the City standard of 239 gpd per ERU (peak month, average day). Based on flow monitoring within Utah County municipalities, diurnal patterns observed indicate a peaking of approximately 2.5 times the average demand.

Level of Service Summary

The existing level of service for The City of Saratoga Springs sanitary sewer facilities can be summarized as follows:

Table 1
Sanitary Sewer Level of Service

Type	Evaluation Criteria
Sewer Gravity Mains	Maximum flow no more than of 80% of full flow pipe capacity
Force Mains	Maximum Flow Velocity = 7 feet per second Maximum Cleanout Spacing = 1200 feet
Lift Stations	Maximum Ratio of Pumping Capacity to Peak Flow = 0.85
Average Day, Peak Month Flow	239 gpd per ERU

PROPOSED LEVEL OF SERVICE - UTAH CODE ANNOTATED 11-36A-302(1)(B) AND 11-36A-302(1)(C)(I)

The proposed level of service is the performance standard used to evaluate system needs in the future. The Impact Fee Act indicates that the proposed level of service may:

1. diminish or equal the existing level of service; or
2. exceed the existing level of service if, independent of the use of impact fees, the City implements and maintains the means to increase the level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

No changes in performance standards are proposed for The City of Saratoga Springs. Future facilities will be constructed to meet the same performance standards identified for the existing level of service.

EXCESS CAPACITY TO ACCOMMODATE FUTURE GROWTH - UTAH CODE ANNOTATED 11-36A-302(1)(A)(III)

The sanitary sewer needs of projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities.

Existing Sanitary Sewer Infrastructure

Existing sanitary sewer infrastructure in The City of Saratoga Springs includes sewer mains, force mains, and lift stations. In areas where existing facilities exist, future growth will utilize a portion of excess capacity in existing facilities.

Existing Demand and Determination of Excess Capacity

To calculate the percentage of existing capacity to be used by future growth in existing facilities, existing and future development patterns were examined. The method used to calculate excess capacity available for use by future development is as follows:

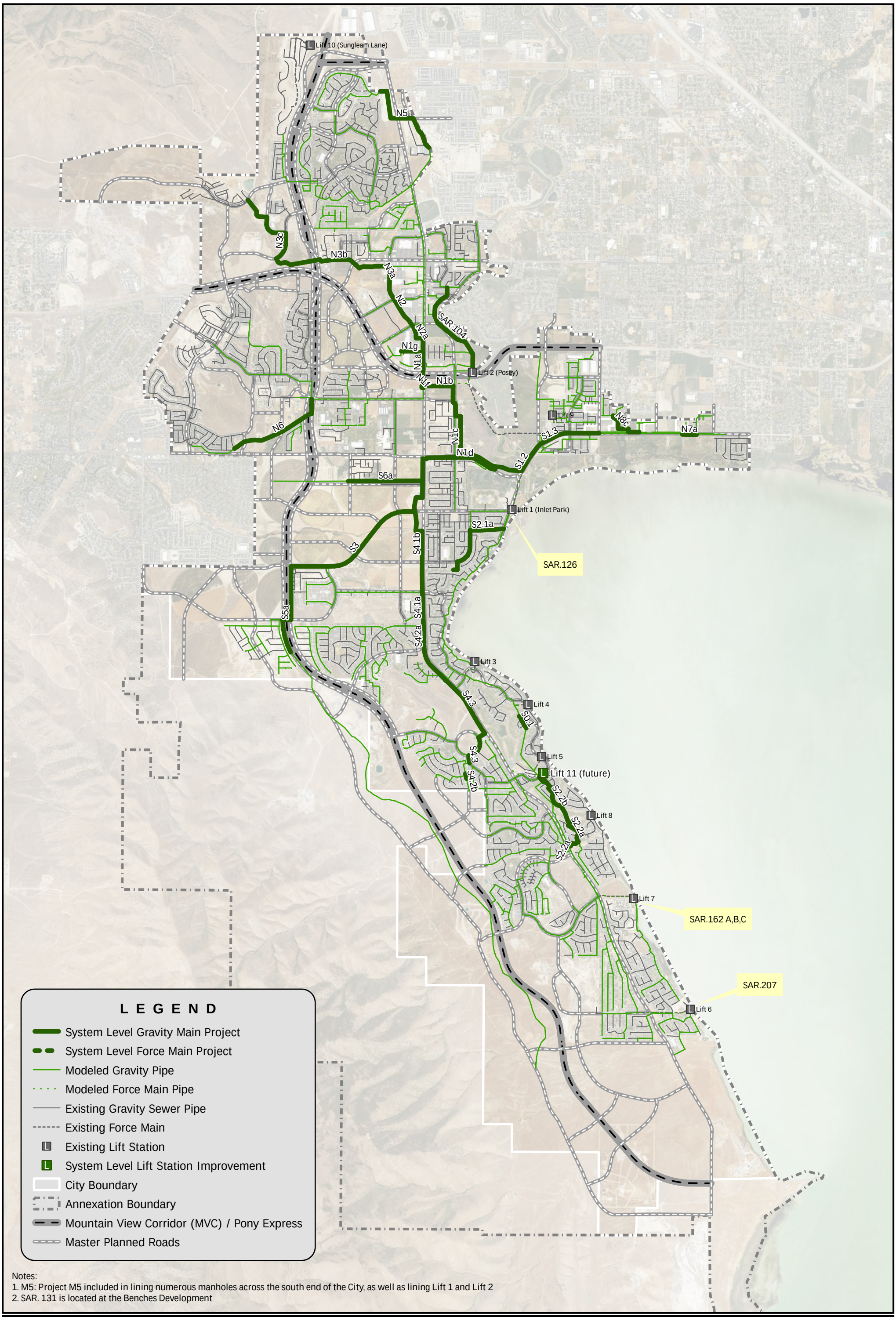
- **Calculate Potential Drainage Area of the Facilities –** The drainage area contributing to each sewer facility or group of facilities was calculated for both existing and future development scenarios.
- **Identify Existing Development –** Based on city records and available aerial photography, the flow rate associated with existing developed areas within each drainage area has been identified.
- **Identify Growth** – Consistent with system growth projections, the flow rate associated with areas of projected growth in each drainage area has been calculated.

- **Calculate Percent of Capacity Used by Growth** – The percent of excess capacity available for use in each facility was calculated by dividing the growth in use in the facility (flow rate for projected developed area) by the maximum use of capacity at buildout (total flow rate for the facilities). This was then divided between growth within the 10-year planning window and growth beyond following the same approach.

In considering available capacity in existing sewer facilities, it should be remembered that available capacity can only serve growth in the areas for which it was constructed. In other words, an existing pipeline that has available capacity for future growth in one area of the City can provide no benefit for projected growth in another area of the City. Thus, it is very common for projects to be needed in one area, even though available capacity may exist in another area. By following the procedure to calculate use of capacity as described above, only the existing capacity that will actually be used by 10-year growth has been identified as reimbursable through impact fees.

It should also be remembered that some facilities are paid for by the property owner and oversized for City needs. In these cases, the method to divide capacity between existing and future growth as described above refers to the City's portion of costs only.

Based on the method described above, Table 2 summarizes the excess capacity used by future growth in those sewer facilities in which the City has available excess capacity and has also expended funds that are eligible for impact fee reimbursement. The location of these projects can be seen in Figure 1. The City has significantly more existing sewer facilities with excess capacity than those shown in the table. However, in most cases, these existing facilities were built through developer contributions that are not eligible for reimbursement through impact fees. While these developer-constructed facilities are not eligible for impact fee reimbursement and are not included in the table, excess capacity in these facilities can be used for growth and has been accounted for in this evaluation.



Notes:
1. M5: Project M5 included in lining numerous manholes across the south end of the City, as well as lining Lift 1 and Lift 2
2. SAR. 131 is located at the Benches Development

BOWEN COLLINS & ASSOCIATES

SARATOGA SPRINGS

SEWER IMPACT FEE FACILITIES PLAN

CONSTRUCTED SEWER PROJECTS

NORTH:

SCALE: 0 2,000 4,000 Feet

FIGURE NO. 1

P:\Saratoga Springs\305-24-03 Sewer Master Plan\4.0 GIS\4.4 APRX\APRX\SS_MdlResults\SS_MdlResults.aprx efica 10/23/2025

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.

DEMANDS PLACED ON FACILITIES BY NEW DEVELOPMENT - UTAH CODE ANNOTATED 11-36A-302(1)(A)(IV)

The planning period to be used for this IFFP is 10 years. Table 3 lists the growth projections for the 10-year planning window.

Table 3
City Growth Projections

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 shown in the table above, the growth expected within the 10-year planning window is 12,889 ERUs. As discussed in the CFP, these growth projections were provided by Hansen Allen & Luce. These growth projections are presented in greater detail in a growth memorandum prepared by Zions Bank Public Finance that has been attached as an appendix to the CFP.

Infrastructure Required to Meet Demands of New Development – Utah Code Annotated 11-36a-302(1)(a)(v)

To satisfy the requirements of state law, demand placed upon system facilities by future development was projected using the process outlined below.

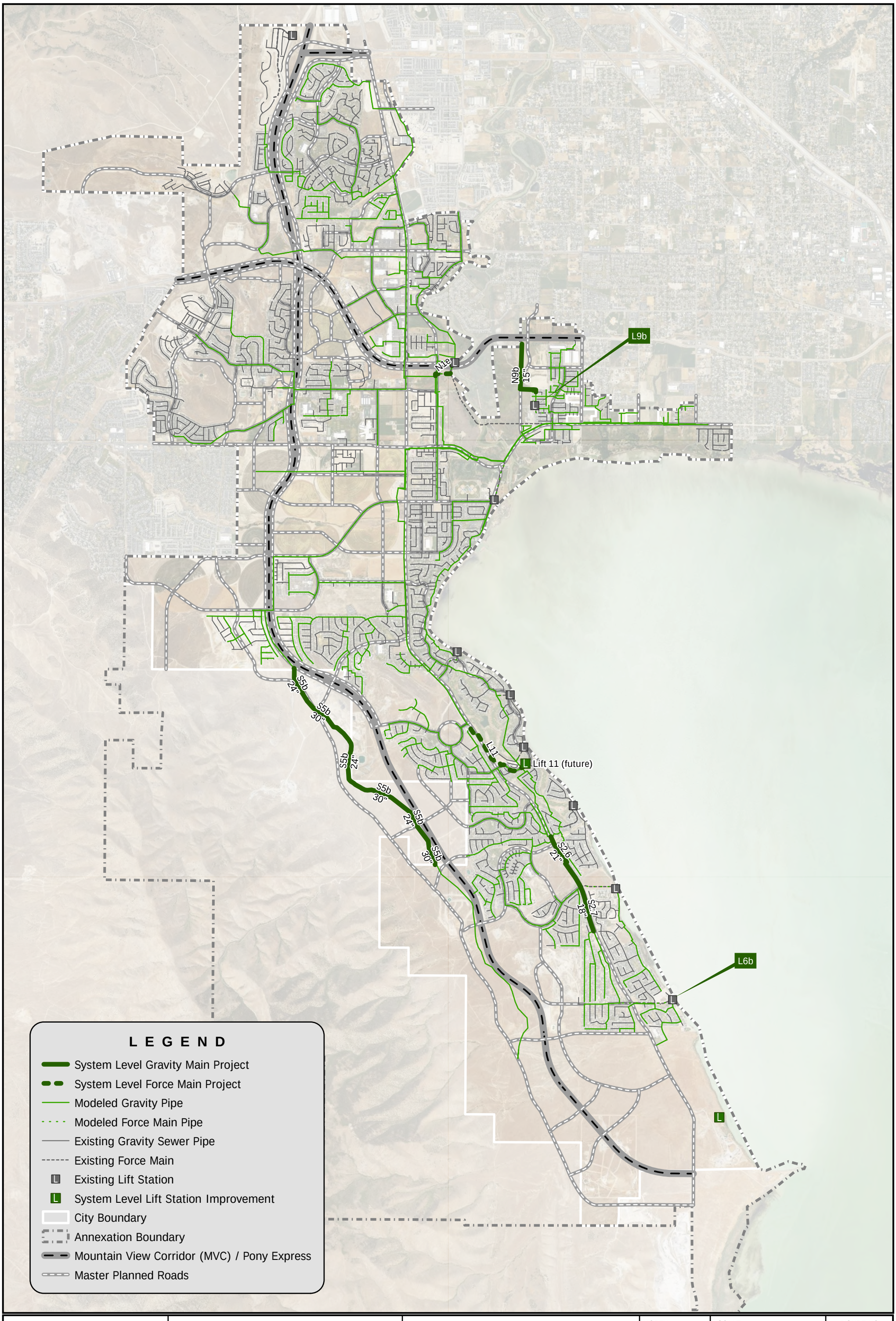
- **Existing Demand –** The demand existing development places on the City's system was estimated based on historic water use and flow records.
- **Existing Capacity** – The capacities of existing system collection facilities were estimated using size data provided by the City and a hydraulic computer model as part of the CFP.
- **Existing Deficiencies** – Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities.
- **Future Demand** - The demand that future development will place on the system was estimated based on development projections as discussed previously.
- **Future Deficiencies** - Future deficiencies in the collection system (portions of the system that are inadequate to accommodate the demand created by future growth) were identified using the defined level of service and results from a hydraulic computer model (discussed in Chapter 5 of the Sewer CFP).

- **Recommended Improvements** – Needed system improvements were identified to meet demands associated with future development (discussed in Chapter 6 of Sewer CFP).

The steps listed above describe the "demands placed upon existing public facilities by new development activity at the proposed level of service; and… the means by which the political subdivision or private entity will meet those growth demands" (Section 11-36a-302-1.a of the Utah Code Annotated).

10-Year Improvement Plan

Planned improvements to satisfy level of service requirements for projected demands within the next 10 years have been identified for the City area in the City's CFP and are summarized in Table 4. These improvements will be constructed in phases as funding becomes available. Only infrastructure to be constructed within a ten-year window will be considered in the calculation of these impact fees to avoid uncertainty surrounding improvements further into the future. The locations of projects to be completed in the next 10 years are approximately shown in Figure 2. It should be noted that Figure 2 only includes those projects with components of cost that are eligible to be included in the impact fee calculation.



BOWEN COLLINS & ASSOCIATES

SARATOGA SPRINGS

SEWER IMPACT FEE FACILITIES PLAN

PROPOSED SEWER PROJECTS 2024-2034

NORTH:

SCALE: 0 2,000 4,000 Feet

FIGURE NO. 2

P:\Saratoga Springs\305-24-03 Sewer Master Plan\4.0 GIS\4.4 APRX\APRX\SS_MdlResults\SS_MdlResults.aprx efica 10/8/2025

Table 4
Proposed Facility Capacity Used by Future Growth

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%**

Project Cost Attributable to Future Growth

To satisfy the requirements of state law, Table 4 provides a breakdown of the impact fee facility projects and the percentage of the project costs attributed to existing and future users. As defined in Section 11-36-304, the impact fee facilities plan should only include "the proportionate share of the costs of public facilities [that] are reasonably related to the new development activity." While some projects from the capital facilities plan are required to meet future growth, some projects also provide benefit to existing users. Projects that benefit existing users include those projects addressing existing capacity deficiencies, maintenance related projects, or projects increasing the level of service for existing users.

For some projects, the division of costs between existing and future users is easy because 100 percent of the project costs can be attributed to one category or the other (e.g. infrastructure needed solely to serve new development can be 100 percent attributed to new growth). For projects needed to address both existing deficiencies and new growth, the costs were divided based on the same method as described for existing facilities in *Excess Capacity to Accommodate Future Growth* above.

It should be noted that Table 4 does not include bond costs related to paying for impact fee eligible improvements. These costs, if any, should be added as part of the impact fee analysis.

Further Division of Project Cost – Cost Attributable to 10 Year Growth

Included in Table 4 is a breakdown of capacity associated with growth through the next 10 years and for growth beyond 10 years. A challenge of sewer infrastructure is that it is not cost effective to add capacity in small increments. Once a pipeline is being built, it needs to be built to satisfy long-term capacity needs. As a result, the improvements proposed in the impact fee facility plan will include capacity for growth beyond the 10-year planning window. To most accurately evaluate the cost of providing service for growth during the next ten years, added consideration has been given to evaluating how much of each improvement will be used in the next 10 years. This has been done following the same methodology as described above.

Basis of Construction Cost Estimates

The costs of construction for projects to be completed within ten years have been estimated based on past BC&A experience with projects of a similar nature. Pipeline project costs are based on average per foot costs for pipes of a similar nature. Lift Station project costs are based on average lift station per horsepower costs for lift stations of a similar nature. Costs include consideration of other components of the sanitary sewer system including manholes and surface restoration as appropriate for each project. Details of the cost estimates can be found in the City's CFP.

ADDITIONAL CONSIDERATIONS

Manner of Financing - Utah Code Annotated 11-36a-302(2)

The City may fund the infrastructure identified in this IFFP through a combination of different revenue sources.

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 will be removed from the system value during the impact fee analysis.

Bonds

None of the costs contained in this IFFP include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFPP may be added to the calculation of the impact fee. This will be considered in the impact fee analysis.

Interfund Loans

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. Consideration of potential interfund loans will be included in the impact fee analysis and should also be considered in subsequent accounting of impact fee expenditures.

Impact Fees

It is recommended that impact fees be used to fund growth-related capital projects as they help to maintain the proposed level of service and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an impact fee analysis will be able to calculate a fair and legal fee that new growth should pay to fund the portion of the existing and new facilities that will benefit new development.

Developer Dedications and Exactions

Developer exactions are not the same as grants. Developer exactions may be considered in the inventory of current and future infrastructure. If a developer constructs a system improvement or dedicates land for a system improvement identified in this IFFP or dedicates a public facility that is recognized to reduce the need for a system improvement, the developer will 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 must reimburse the difference to the developer.

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

Necessity of Improvements to Maintain Level of Service - Utah Code Annotated 11-36a-302(3)

According to State statute, impact fees cannot be used to correct deficiencies in the City's system and must be necessary to maintain the proposed level of service established for all users. Only those facilities or portions of facilities that are required to maintain the proposed level of service for future growth have been included in this IFFP. This will result in an equitable fee as future users will not be expected to fund any portion of the facilities that will benefit existing residents.

School Related Infrastructure - Utah Code Annotated 11-36a-302(2)

As part of the noticing and data collection process for this plan, information was gathered regarding existing and future school district and charter school development. Where the City is aware of the planned location of a school, required public facilities to serve the school have been included in the impact fee analysis. Table 5 shows the existing schools and the accompanied drinking water usage for 2023. Table 6 shows the best available information regarding planned schools.

Table 5
Existing Schools

School Name	Location / Address	Drinking Water Usage 2024 (acre-ft)	Type of School
Harvest Elementary	2105 N Providence Dr	1.66	Elementary School
Riverview Elementary	273 Aspen Hills Blvd	4.21	Elementary School
Thunder Ridge Elementary	264 N 750 W	1.80	Elementary School
Sage Hills Elementary	3033 W Swainson Ave	1.58	Elementary School
Saratoga Shores Elementary	1415 S Parkside Dr	31.75[a]	Elementary School
Springside Elementary	694 S Highpoint Dr	1.17	Elementary School
Lake Mountain Middle School	1058 S Old Farm Rd	2.66	Junior High School
Vista Heights Middle School	484 Pony Express Pkwy	3.70	Junior High School
West Lake High School	99 N 200 W	0.01	High School
Lakeview Academy of Science Arts and Technology	527 W 400 N	3.60	Charter
Horizon Special Needs School	682 W 210 N, Marie Way	0.50	Special Purpose
Mountain Sunrise Academy	1802 E 145 N	1.66	Charter
Harbor Point Elementary	4189 E Schooner Dr.	1.10	Elementary School
Ascent Academies of Utah	992 W Chianti St. 1692 N Chianti St.	0.75 N/a	Charter

a. Saratoga Shores Elementary does not have a connection to the PI system and uses drinking water for irrigation.

Table 6
Planned Schools

School Name	Location / Address
Planned Junior High	Parcel 58:023:0274
Planned Elementary School	Mt Saratoga Development; Parcel 58:034:0737
Planned Elementary School	Wander Development; Parcel 58:035:0138
Planned High School	Parcels 58:041:0187 and 58:041:0279
Lakeview Academy of Science Arts and Technology Expansion	Parcel 45:511:0001

Sewer use is a function of indoor water use, so sewer impact fees are charged based on indoor water use. Analysis of the category of school (elementary school, junior high school, high school, charter school) and the average past usage for each school determined the appropriate impact fee for schools based on the typical indoor water use for each school. Future schools will be charged based on the size of their required water service. Based on the historic usage above, the expected required service size for each category is as follows: elementary school will be charged for a 2-inch lateral service, future junior high schools will be charged for a 3-inch lateral service, future high schools will be charged for a 6-inch lateral service, and future charter and special purpose schools will be charged for a 2-inch lateral service. Schools falling outside typical usage patterns for these categories may request a custom analysis to determine expected drinking water demands and corresponding required service size.

Noticing and Adoption Requirements - Utah Code Annotated 11-36a-502

The Impact Fees Act requires that entities must publish a notice of intent to prepare or modify any IFFP. If an entity prepares an independent IFFP rather than include a capital facilities element in the general plan, the actual IFFP must be adopted by enactment. Before the IFFP can be adopted, a reasonable notice of the public hearing must be published in a local newspaper at least 10 days before the actual hearing. A copy of the proposed IFFP must be made available in each public library within the City during the 10-day noticing period for public review. Utah Code requires that the City must post a copy of the ordinance in at least three places. These places may include the City offices and the public libraries within the City's jurisdiction. Following the 10-day noticing period, a public hearing will be held, after which the City may adopt, amend and adopt, or reject the proposed IFFP.

IMPACT FEE CERTIFICATION - UTAH CODE ANNOTATED 11-36A-306(1)

This IFFP has been prepared in accordance with Utah Code Title 11 Chapter 36a (the "Impact Fees Act"), which prescribes the laws pertaining to Utah municipal capital facilities plans and impact fee analyses. 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(1), 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; and
3. 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.

Justin Dietrich, P.E.