



SPRINGVILLE CITY

Water Reclamation Facility Impact Fee Analysis
October 2024



ZIONS PUBLIC FINANCE, INC.

EXECUTIVE SUMMARY

An impact fee is a one-time fee imposed on new development activity to mitigate the impact of new development on capital facilities. In conjunction with this Impact Fee Analysis, Aqua Engineering prepared the Water Reclamation Facility Master Plan and Impact Fee Facilities Plan (IFFP) 2024. The IFFP forms the basis for this impact fee analysis.

The recommended impact fee structure presented in this analysis has been prepared to satisfy the Impact Fees Act, Utah Code Ann. § 11-36a-101 et. seq., and represents the maximum impact fees Springville City (“City”) may assess. The City will be required to use revenue sources other than impact fees to fund any projects that constitute repair and replacement, cure any existing deficiencies, or increase the level of service for existing users.

Wastewater¹ Demand

The City is anticipated to grow by 3,508 equivalent residential units (ERUs) between 2023 and 2033 – the timeframe of the IFFP analysis.²

Wastewater Service Levels

Level of service (LOS) defines the water capital facility demands that a typical Equivalent Residential Unit (ERU), will require and should pay for with impact fees. The IFFP defines existing service levels as follows per ERU.

TABLE 1: WASTEWATER EXISTING SERVICE LEVELS PER ERU

Description	Existing LOS
Flow	250 gpd/ERU
BOD	0.46 lbs. BOD/day (220 mg/L)
TSS	0.35 lbs. TSS/day
TKN	0.072 lbs. TKN/day
Phosphorous	0.013 lbs. TP/day

Source: IFFP, p. 92

Wastewater Service Area

There is one service area for wastewater that encompasses the boundaries of Springville City.

Excess Capacity

According to the IFFP, there is excess capacity in the wastewater system in the amount of \$8,119,435 that will serve new development.

New Construction

Total new construction costs required by growth over the next 10 years are projected to reach \$1,714,038.

¹ The terms “sewer” and “wastewater” are used interchangeably in this analysis.

² IFFP, p. 94. Does not include the 3,400 ERUs attributed to Nestle. According to the IFFP, “Impact fees must be established on the portion of the design capacity dedicated to the domestic collection system. Costs and terms for the 3,400 ERUs committed to flow from Nestle have been negotiated separately.”

Wastewater System Impact Fee Calculation

The gross fee is first calculated, followed by credits to be made for the portion of future projects that will benefit existing development.

TABLE 2: MAXIMUM GROSS FEE PER ERU

Description	Amount
Buy-In to Excess Capacity	\$1,457.40
Interest Cost	\$299.37
New Construction	\$250.44
Consultant Costs	\$14.65
Fund Balance Credit	-
Gross Fee per ERU	\$2,021.87

Credits do not need to be calculated on the outstanding Series 2021 Water & Sewer Revenue Bond because the wastewater amount of the bond is \$7,975,890 which is less than the buy-in amount of \$8,119,435. Therefore, impact fees should be sufficient to make the remaining payments on the bond and rate increases will not be needed to cover the bond payments and no double payment will occur by new development.

Credits must be made, however, for the proportionate share of new projects that benefit existing development so that new development is not charged twice. The proportionate share of new projects that benefit existing development is \$11,401,859 based on the IFFP which is anticipated to be paid for with increased rates, spread over 10 years, and therefore new development must be credited so that it does not pay the full impact fee as well as higher rates.

These credits are then applied to the gross fee to arrive at the maximum fee per ERU per year.

TABLE 3: CREDITS ON PROJECTS BENEFITTING EXISTING DEVELOPMENT

Year	ERUs	Payment	Gross Fee	Payment per Year	NPV* Future Projects	Max Fee
2024	20,032	\$1,140,186	\$2,021.87	\$56.92	\$409.68	\$1,612.20
2025	20,520	\$1,140,186	\$2,021.87	\$55.56	\$373.24	\$1,648.63
2026	20,856	\$1,140,186	\$2,021.87	\$54.67	\$336.34	\$1,685.53
2027	21,197	\$1,140,186	\$2,021.87	\$53.79	\$298.49	\$1,723.39
2028	21,544	\$1,140,186	\$2,021.87	\$52.92	\$259.62	\$1,762.25
2029	21,897	\$1,140,186	\$2,021.87	\$52.07	\$219.68	\$1,802.19
2030	22,255	\$1,140,186	\$2,021.87	\$51.23	\$178.59	\$1,843.28
2031	22,522	\$1,140,186	\$2,021.87	\$50.63	\$136.29	\$1,885.58
2032	22,792	\$1,140,186	\$2,021.87	\$50.02	\$92.48	\$1,929.40
2033	23,066	\$1,140,186	\$2,021.87	\$49.43	\$47.08	\$1,974.80

*NPV = net present value discounted at 5 percent

CHAPTER 1: OVERVIEW OF THE WATER IMPACT FEES

Summary

An impact fee is intended to recover the City's costs of building wastewater system capacity to serve new residential and non-residential development rather than passing these growth-related costs on to existing users through rates. The Utah Impact Fees Act allows only certain costs to be included in an impact fee so that only the fair cost of expansionary projects or existing unused capacity paid for by the City is assessed through an impact fee.

Costs to be Included in the Impact Fee

The impact fees proposed in this analysis are calculated based upon:

- Buy-in to existing, excess capacity;
- New capital infrastructure that will serve new development; and
- Professional and planning expenses related to the construction of system improvements that will serve new development.
- Necessary credits

The costs that cannot be included in the impact fee are as follows:

- Costs for projects that cure system deficiencies;
- Costs for projects that increase the LOS above that which is currently provided;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

Utah Code Legal Requirements

Utah law requires that communities and special districts prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities/districts give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. The City has retained Zions Public Finance, Inc. (ZPFI) to prepare this Impact Fee Analysis in accordance with legal requirements.

Notice of Intent to Prepare Impact Fee Analysis

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Plan (Utah Code §11-36a-503). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA by posting notice.

Preparation of Impact Fee Analysis

Utah Code requires that each local political subdivision, before imposing an impact fee, prepare an impact fee analysis. (Utah Code 11-36a-304).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis which is required to:

- (1) An impact fee analysis shall:
 - (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
 - (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
 - (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
 - (d) estimate the proportionate share of:
 - (i) the costs for existing capacity that will be recouped; and
 - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
 - (e) identify how the impact fee was calculated.

- (2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:
 - (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
 - (b) the cost of system improvements for each public facility;
 - (c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;
 - (d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;
 - (e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;
 - (f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;
 - (g) extraordinary costs, if any, in servicing the newly-developed properties; and
 - (h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Certification of Impact Fee Analysis

Utah Code states that an Impact Fee Analysis shall include a written certification from the person or entity that prepares the Impact Fee Analysis. This certification is included at the conclusion of this analysis.

CHAPTER 2: IMPACT FROM GROWTH UPON THE CITY'S FACILITIES AND LEVEL OF SERVICE

Utah Code 11-36a-304(1)(a)

Projected Wastewater Demands

Table 4 shows ERU growth projections which will place additional demand on the City's wastewater system. The City's wastewater system currently (year 2023) serves 16,156 equivalent residential units (ERUs)³ which will grow to an estimated 19,664 ERUs by 2033. The IFFP is based on 2023 data and calculates the growth between 2023 and 2033 as 3,508 ERUs.

Water Service Area

ERUs within Springville City are projected to grow as follows:

TABLE 4: GROWTH IN DEMAND

Year	ERUs
2023	16,156
2024	16,631
2025	17,120
2026	17,454
2027	17,794
2028	18,141
2029	18,494
2030	18,855
2031	19,121
2032	19,391
2033	19,664
Growth in ERUs, 2023-2033	3,508

Source: Springville City, p. 93; ZPFI

Existing and Proposed LOS Analysis

Level of service (LOS) defines the water capital facility demands that a typical ERU will require and should pay for with impact fees. The IFFP defines service levels as follows per ERU.

TABLE 5: EXISTING SERVICE LEVELS

Description	Existing LOS
Flow	250 gpd/ERU
BOD	0.46 lbs. BOD/day (220 mg/L)
TSS	0.35 lbs. TSS/day
TKN	0.072 lbs. TKN/day
Phosphorous	0.013 lbs. TP/day

Source: IFFP, p. 92

³ Does not include Nestle which is not a part of this impact fee analysis

CHAPTER 3: IMPACT ON CAPACITY FROM DEVELOPMENT ACTIVITY

Utah Code 11-36a-304(1)(b)(c)

Excess Capacity

The IFFP identifies excess capacity in the existing system that will serve an additional 2,444 to 6,844 ERUs. The actual cost of the existing facilities is \$22,160,666.⁴ Of this amount, \$8,119,435 represents excess capacity.

TABLE 6: EXISTING EXCESS CAPACITY

Past Construction	Total Cost	New ERUs	% Impact Fee	Impact Fee Eligible
Initial Plant - All ERUs	\$9,275,103	2,444	11.11%	\$1,030,380
2010 WRF Upgrade & Expansion	\$10,704,310	6,844	60.94%	\$6,523,582
Post 2010 Plant Upgrades - All ERUs	\$2,181,253	6,844	25.92%	\$565,473
TOTAL	\$22,160,666			\$8,119,435

Source: IFFP, p. 98

CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

Utah Code 11-36a-304(1)(b)(c)

The means by which the City will meet growth demands include constructing the following projects as set forth in the Impact Fee Facilities Plan. The cost of impact-fee eligible capital facility construction projects over the next 10 years total \$1,714,038.

TABLE 7: NEW CONSTRUCTION IMPROVEMENTS

	Total Cost	Impact Fee Eligible	Existing Users
Headworks Upgrades	\$3,329,040	\$990,607	\$2,338,433
Primary Clarifier Rehabilitation	\$310,200		\$310,200
Tertiary Filtration Upgrades	\$2,437,600		\$2,437,600
Digester Biogas Handling	\$591,662		\$591,662
MCC, PLC, & Transformer Replacement	\$483,000		\$483,000
Digester Sludge Handling Upgrades	\$1,903,687		\$1,903,687
Convert STM to Aeration Basin	\$1,270,150		\$1,270,150
Standby Generator	\$1,322,520	\$342,853	\$979,667
Sludge Dewatering Upgrades	\$1,468,038	\$380,578	\$1,087,460
TOTAL	\$13,115,897	\$1,714,038	\$11,401,859

Source: IFFP, p. 98

⁴ IFFP, p. 98

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

Maximum Legal Wastewater Impact Fee per ERU

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future and actual cost of existing system improvements that benefit new growth that can be recouped through impact fees. The impact fee for existing assets must be based on the actual costs (when excess capacity is available) while the fees for construction of new facilities can be based on reasonable future costs of the system.

Existing Excess Capacity

The existing excess capacity in the system that will serve between 2,444 and 6,844 ERUs has an actual cost of \$22,160,666, with \$8,119,435 of existing, excess capacity. Therefore, the buy-in cost is \$1,457.40 per ERU.

TABLE 8: EXCESS CAPACITY PROPORTIONATE SHARE CALCULATION

Past Construction	Total Cost	New ERUs	% Impact Fee	Impact Fee Eligible	Buy-In
Initial Plant - All ERUs	\$9,275,103	2,444	11.11%	\$1,030,380	\$421.60
2010 WRF Upgrade & Expansion	\$10,704,310	6,844	60.94%	\$6,523,582	\$953.18
Post 2010 Plant Upgrades - All ERUs	\$2,181,253	6,844	25.92%	\$565,473	\$82.62
TOTAL	\$22,160,666			\$8,119,435	\$1,457.40

Interest costs can be included for the Series 2008 (now refinanced) and the outstanding Series 2021 Water & Sewer Revenue Bond. Total interest costs allocable to wastewater on the Series 2008 bond and 2021 refinancing bond total \$6,885,613.62.⁵ This is based on an allocation of 80.2 percent of interest costs on the Series 2021 bond to wastewater and 19.8 percent to water.

TABLE 9: INTEREST COST ON OUTSTANDING BOND

Bond	Amount
Series 2008	
Original 2008 bond amount	\$15,135,000
Sewer amount of 2008 bond	\$9,100,000
Series 2008 interest amount to sewer	\$4,705,448
Series 2021	
Water % of Refinance	19.8%
Sewer % of Refinance	80.2%
Total Bond Interest Amount	\$2,718,411
Wastewater Interest Amount	\$2,180,165.62
Total Interest Amount to Wastewater	\$6,885,613.62

⁵ Source: Springville City

TABLE 10: INTEREST COST PER ERU

Interest Cost Calculation	Amount
Wastewater Interest	\$6,885,614
Capacity Served	23,000
Interest Cost per ERU	\$299.37

New Construction

Total new improvement costs attributable to new development over the next 10 years will reach \$1,714,038. With growth of 3,508 ERUs over the next 10 years, the cost per ERU is \$250.44.

TABLE 11: PROPORTIONATE SHARE ANALYSIS, NEW IMPROVEMENTS

Description	Amount
Total Cost	\$13,115,897
Impact-Fee Eligible	\$1,714,038
Capacity ERUs	23,000
Growth in Capacity	6,844
Additional Capacity Consumed 2023-2033	3,508
% of Capacity Consumed, 2023-2033	51%
Cost of Capacity Consumed, 2023-2033	\$878,626
Cost per ERU	\$250.44

Consultant Costs

The Impact Fees Act allows for fees charged to include the reimbursement of consultant costs incurred in the preparation of the IFFP and IFA.

TABLE 12: PROPORTIONATE SHARE ANALYSIS – CONSULTANT COSTS

Consultant Costs	Amount
Total Consultant Costs	\$51,410.00
Growth in ERUs, 2023-2033	3,508
Consultant Cost per ERU	\$14.65

Impact Fee Fund Balance

Based on information provided by the City, there were no unspent funds in the wastewater impact fees account.

Credits Against Impact Fees

Credits do not need to be calculated on the outstanding Series 2021 Water & Sewer Revenue Bond because the wastewater amount of the bond is \$7,900,000 which is less than the buy-in amount of \$8,119,435. Therefore, impact fees should be sufficient to make the remaining payments on the bond and rates

increases will not be needed to cover the bond payments. Therefore, no double payment will occur by new development.

Credits must be made, however, for the proportionate share of new projects that benefit existing development in order that new development is not charged twice. The proportionate share of new projects benefitting existing development is \$11,401,859 based on the IFFP which is anticipated to be paid for with increased rates, spread over 10 years, and therefore new development must be credited so that it does not pay the full impact fee as well as higher rates.

These credits are then applied to the gross fee calculated to arrive at the maximum fee per ERU per year.

TABLE 13: CREDITS ON PROJECTS BENEFITTING EXISTING DEVELOPMENT

Year	ERUs	Payment	Gross Fee	Payment per Year	NPV* Future Projects	Max Fee
2024	20,032	\$1,140,186	\$2,021.87	\$56.92	\$409.68	\$1,612.20
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2032	22,792	\$1,140,186	\$2,021.87	\$50.02	\$92.48	\$1,929.40
2033	23,066	\$1,140,186	\$2,021.87	\$49.43	\$47.08	\$1,974.80

*NPV = net present value discounted at 5 percent

CERTIFICATION

Zions Public Finance, Inc. certifies that the attached impact fee analysis:

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 for 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. offset costs with grants or other alternate sources of payment; and
4. complies in each and every relevant respect with the Impact Fees Act.