



Clearfield City

DRAFT Sewer Impact Fee Analysis
June 2023



ZIONS PUBLIC FINANCE, INC.

Contents

Executive Summary.....	2
Sewer System Overview.....	2
Level of Service – Equivalent Residential Connection	2
Growth in Demand.....	2
Sewer Service Area	2
Existing Excess Capacity	2
Collection System.....	2
New Construction Costs.....	2
Sewer Impact Fee Calculation	3
Non-Standard Demand Adjustments	4
Chapter 1: Overview of the Sanitary Sewer Impact Fees.....	5
Summary	5
Costs to be Included in the Impact Fee	5
Utah Code Legal Requirements	5
Notice of Intent to Prepare Impact Fee Analysis	5
Preparation of Impact Fee Analysis	6
Certification of Impact Fee Analysis	7
Chapter 2: Impact From Growth Upon the City’s Facilities and Level of Service	8
Service Area	8
Sewer Demands	8
Existing and Proposed LOS Analysis	8
Chapter 3: Impact on Capacity from Development Activity	9
Excess Capacity	9
Chapter 4: System Improvements Required from Development Activity	10
Future 10-Year Wastewater Capital Projects.....	10
Chapter 5: Proportionate Share Analysis	11
Maximum Legal Wastewater Impact Fee per ERU	11
Existing Projects with Excess Capacity.....	11
New Construction	11
Consultant Fees	11
Summary of Gross Impact Fee	12
Non-Standard Demand Adjustments	13
Certification	14

EXECUTIVE SUMMARY

Clearfield City commissioned Zions Public Finance, Inc. (ZPFI) to calculate the City's impact fees in accordance with Utah State Law. An impact fee is a payment of money imposed upon new development activity to mitigate the impact of new development on public infrastructure. In conjunction with this project, JUB Engineers, Inc. prepared the Sewer Impact Fee Facilities Plan (IFFP) dated May 2023.

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 that the City may assess. The City will be required to use revenue sources other than impact fees to fund any projects identified in the IFFP that constitute repair and replacement, cure any existing deficiencies, or increase the level of service for existing users.

Sewer System Overview

Level of Service – Equivalent Residential Connection

Level of service (LOS) defines the sewer demands that a typical residential user, expressed as an Equivalent Residential Unit (ERU), will require and should pay for through impact fees. Impact fee law prohibits the use of impact fees to increase the LOS above the current service levels. At times, a sewer system may need to increase the LOS to cure an existing deficiency, but projects that fix deficiencies must be paid for through non-impact fee revenues and a credit must be provided to the impact fee payer.

The IFFP states that existing and proposed service levels are the same and are included in detail later in the IFA.

Growth in Demand

In 2022 the City served 12,154 ERUs and is anticipated to grow to approximately 15,973 ERUs by 2032, for an increase of 3,819 ERUs over the 10-year period. A residential unit is equated to one ERU and non-residential properties are converted to the appropriate number of drainage fixture units (DFUs) based on an average of 21 DFUs per residential unit (one ERU).

Sewer Service Area

The Service Area covers the entire City for the purpose of calculating impact fees.

Existing Excess Capacity

Collection System

The IFFP identifies the percentage of existing excess capacity in the sewer collection system. Acquired at an actual cost of \$6,007,406, new development will consume 22 percent (\$1,321,629) of the actual cost.

New Construction Costs

The IFFP identifies a total of \$2,104,291 in new construction costs attributable to new development over the next 10 years.

Sewer Impact Fee Calculation

The impact fee calculation is shown in the table below and results in a maximum gross fee of \$914.54 per ERU before credits.

TABLE 1: PROPORTIONATE SHARE ANALYSIS – GROSS FEE

Description	Amount
Existing capacity	\$346.07
New construction	\$551.01
Consultant costs	\$17.47
Impact fee fund balance	\$0.00
Subtotal per ERU before credits	\$914.54

However, the IFFP identifies that a portion of the new construction projects are needed to cure existing deficiencies in the sewer system. Therefore, new development cannot be expected to pay the entire impact fee and then also contribute over time, through increased sewer rates, to curing existing deficiencies in the sewer system. The IFFP allocates \$510,900 of new construction costs as benefits to existing development. Therefore, credits against the gross impact fee have been made as follows for a 10-year period.

TABLE 2: CREDIT PER ERU FOR PROJECTS THAT BENEFIT EXISTING DEVELOPMENT

Year	ERUs	Payment	Payment per ERU	NPV*
2023	12,491	\$51,090	\$4.09	\$28.32
2024	12,837	\$51,090	\$3.98	\$25.65
2025	13,192	\$51,090	\$3.87	\$22.95
2026	13,558	\$51,090	\$3.77	\$20.23
2027	13,933	\$51,090	\$3.67	\$17.47
2028	14,319	\$51,090	\$3.57	\$14.68
2029	14,716	\$51,090	\$3.47	\$11.84
2030	15,124	\$51,090	\$3.38	\$8.96
2031	15,542	\$51,090	\$3.29	\$6.03
2032	15,973	\$51,090	\$3.20	\$3.20

*NPV = net present value discounted at 5 percent

Additional credits need to be made for the City's outstanding sewer revenue bond that retires in 2029.

TABLE 3: CREDIT PER ERU FOR OUTSTANDING BOND

Year	ERUs	Payment	Payment per ERU	NPV*
2023	12,491	\$74,749	\$5.98	\$35.47
2024	12,837	\$74,749	\$5.82	\$31.25
2025	13,192	\$74,749	\$5.67	\$26.99
2026	13,558	\$74,749	\$5.51	\$22.68
2027	13,933	\$74,749	\$5.36	\$18.30
2028	14,319	\$74,749	\$5.22	\$13.85
2029	14,716	\$74,749	\$5.08	\$9.32

Year	ERUs	Payment	Payment per ERU	NPV*
*NPV = net present value discounted at 5 percent				

The credits for the projects benefitting existing development, as well as the credits for the outstanding bond, must be subtracted from the maximum gross fee of \$914.54 to calculate the maximum impact fee per year per ERU and per drainage fixture unit (DFU). Based on Addendum-1 Clearfield City – Culinary Water IFFP Drainage Fixture Unit Calculations from J-U-B Engineers dated April 24, 2023, there are, on average, 21 DFUs per ERU.

TABLE 4: MAXIMUM IMPACT FEE PER ERU OR DFU

	2023	2024	2025	2026	2027	2028	2029	2030
ERC	\$861.15	\$868.28	\$875.51	\$882.84	\$890.28	\$897.86	\$905.58	\$908.51
DFU	\$41.01	\$41.35	\$41.69	\$42.04	\$42.39	\$42.76	\$43.12	\$43.26

Non-Standard Demand Adjustments

The City reserves the right under the Impact Fees Act (Utah Code Ann. § 11-36a-402(1)(c, d)) to assess an adjusted fee to respond to unusual circumstances and to ensure that the impact fees are assessed fairly. The impact fee ordinance should include a provision that permits adjustment of the fee for a development based upon studies and data submitted by the developer that indicate a more realistic and accurate impact on the City's infrastructure.

CHAPTER 1: OVERVIEW OF THE SANITARY SEWER IMPACT FEES

Summary

An impact fee is intended to recover the City's costs of building excess wastewater capacity from new residential or 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 by the City is assessed through an impact fee. Eligible costs include future projects, historic costs of existing assets that still have capacity available to serve growth, future or outstanding debt related to these eligible projects, and certain professional expenses related to planning for growth. Project improvements that only serve a specific development or subdivision cannot be included. System improvements that cure a deficiency or enhance the Level of Service (LOS) cannot be included without an appropriate credit.

The impact fee analysis provides documentation of a fair comparison, or rational nexus, between the impact fee charged to new development and the demands that new growth will have on the system.

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.

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

- Projects that cure system deficiencies for existing users;
- Projects that increase the level of service 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;
- Interest costs related to outstanding or future bonds that have been issued to fund non-impact fee eligible projects such as repair and replacement and curing deficiency; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

Utah Code Legal Requirements

Utah law requires that entities prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that entities 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.

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:

- (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.

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

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

Service Area

The service area includes all areas within the City's boundaries.

Sewer Demands

The table below shows Equivalent Residential Unit (ERU) growth projections.

TABLE 5: GROWTH IN DEMAND

Year	ERUs
2022	12,154
2023	12,491
2024	12,837
2025	13,192
2026	13,558
2027	13,933
2028	14,319
2029	14,716
2030	15,124
2031	15,542
2032	15,973
Growth in ERUs, 2022-2032	3,819

Source: Clearfield City Sanitary Sewer Master Plan p. 9

Existing and Proposed LOS Analysis

The IFFP states that existing and proposed service levels are the same and are described as follows:

The LOS for the collection system pipes is determined based on the ratio of the maximum flow in the pipe during peak hour (q) to the capacity of the pipe flowing full (Q), or q/Q . The q/Q value must be less than or equal to 0.85. A q/Q value of 0.85 represents a pipe flowing at 85% of its capacity.

The area on SR-193 between 200 South and the railroad has pipe segments that currently exceed the established LOS on a peak day, with q/Q values greater than 0.85. System improvements will be required to mitigate the deficiency.

There are other areas in the model near 700 South State Street and near 930 South 500 East/Kensington Lane that show pipes exceeding the LOS, which may be a result of potential elevation and/or pipe size discrepancies within the model data. These areas should be monitored by the City to determine if an actual capacity concern exists. If such is the case,

projects to mitigate the concerns should be completed.

The existing q/Q values are based on the hydraulic computer model, using a flow of 70 gpcd, with a peaking factor of 2.5.

CHAPTER 3: IMPACT ON CAPACITY FROM DEVELOPMENT ACTIVITY

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

Excess Capacity

The City has the right to increase the established LOS in the future by constructing facilities that will provide greater capacity per ERU, but such LOS increases cannot be funded through impact fees. If the proposed LOS is higher than the existing LOS, then a deficiency exists and will be cured through sources of funding other than impact fees. Many of the future projects identified in the IFFP will serve existing residents, as well as new development, which means a credit must be included in the impact fee calculation to offset the cost of constructing infrastructure that benefits existing users.

With growth of 3,819 ERUs between 2022 and 2032, the IFFP states that new growth represents 22.0% of the total capacity of the existing collection system. This means that new development between 2022 and 2032 is responsible for 22.0% of the costs of the existing collection system (\$6,007,406), or \$1,321,629.

TABLE 6: EXISTING EXCESS CAPACITY—COLLECTION SYSTEM

Description	Amount
Cost of Collection Facilities	\$6,007,406
% Consumed by 10-year Growth	22.0%
Cost to New Growth	\$1,321,629

CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

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

Future 10-Year Wastewater Capital Projects

The City intends to build the following projects within the impact fee planning horizon to serve the demands of new growth.

TABLE 7: IMPACT-FEE ELIGIBLE CAPITAL PROJECTS

Project	Project Description	Project Cost	Cost to Existing (2021)	Cost to 10-Year Growth (2031)	Cost to Growth after 2031
1	Upsize 24" sewer pipe (SR193 from 200 South to railroad)	\$1,011,000	\$324,442	\$209,951	\$476,606
2	Upsize 24" sewer pipe (SR193 from railroad to 450 South)	\$1,360,000	\$29,980	\$421,318	\$908,702
3	Upsize 15" sewer pipe (1000 East/Antelope Drive)	\$236,000	\$4,323	\$140,914	\$90,763
	MOC Phase 3 Public Works Building (Sanitary Sewer System Portion Only)	\$1,500,000		\$628,732	\$871,268
	TOTAL	\$4,110,000	\$510,900	\$2,104,291	\$1,494,810

Source: Clearfield City IFFP, p. 17

The IFFP shows that \$510,900 of the new projects will benefit existing development and therefore a credit will need to be made in the impact fee calculations so that new development does not pay twice.

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future and historic cost of existing system improvements that benefit new growth and that can be recouped through impact fees. The impact fee for existing assets must be based on the actual costs while the fees for construction of new facilities must be based on reasonable future costs of the system. This chapter will show that the proposed impact fee for system improvements is reasonably related to the impact on the sewer system from future development activity.

Maximum Legal Wastewater Impact Fee per ERU

Existing Projects with Excess Capacity

The existing excess capacity to be consumed over the next ten years is \$1,321,629 for the collection system. With projected growth of 3,819 ERUs by 2032, the cost per ERU is \$346.07 for buy-in to the collection system.

TABLE 8: PROPORTIONATE SHARE ANALYSIS-EXCESS CAPACITY BUY-IN

Description	Amount
Cost of Collection Facilities	\$6,007,406
% Consumed by 10-year Growth	22.0%
Cost to New Growth	\$1,321,629
Growth in ERUs, 2022-2032	3,819
Cost per ERU	\$346.07

New Construction

Table 7 shows the new improvements necessary to meet the demands of new growth by 2032. With anticipated growth of 3,819 ERUs by 2032, the cost per ERU is \$551.01.

TABLE 9: PROPORTIONATE SHARE ANALYSIS- NEW CONSTRUCTION

Description	Amount
Cost to new development	\$2,104,291
Growth in ERUs, 2022-2032	3,819
Cost per ERU	\$551.01

Consultant Fees

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

TABLE 10: PROPORTIONATE SHARE ANALYSIS – CONSULTANT FEES

Description	Amount
Consultant costs	\$17,700
Growth in ERUs, 2022-2032	3,819
Cost per ERU	\$4.63

Summary of Gross Impact Fee

The impact fee calculation is shown in the table below and results in a maximum gross fee of \$914.54 per ERU before credits.

TABLE 11: PROPORTIONATE SHARE ANALYSIS – GROSS FEE

Existing capacity	\$346.07
New construction	\$551.01
Consultant costs	\$17.47
Impact fee fund balance	\$0.00
Subtotal per ERU before credits	\$914.54

However, the IFFP identifies that a portion of the new construction projects are needed to cure existing deficiencies in the sewer system. Therefore, new development cannot be expected to pay the entire impact fee and then also contribute over time, through increased sewer rates, to curing existing deficiencies in the sewer system. The IFFP allocates \$510,900 of new construction costs as benefits to existing development. Therefore, credits against the gross impact fee have been made as follows for a 10-year period.

TABLE 12: CREDIT PER ERU FOR PROJECTS THAT BENEFIT EXISTING DEVELOPMENT

Year	ERUs	Payment	Payment per ERU	NPV*
2023	12,491	\$51,090	\$4.09	\$28.32
2024	12,837	\$51,090	\$3.98	\$25.65
2025	13,192	\$51,090	\$3.87	\$22.95
2026	13,558	\$51,090	\$3.77	\$20.23
2027	13,933	\$51,090	\$3.67	\$17.47
2028	14,319	\$51,090	\$3.57	\$14.68
2029	14,716	\$51,090	\$3.47	\$11.84
2030	15,124	\$51,090	\$3.38	\$8.96
2031	15,542	\$51,090	\$3.29	\$6.03
2032	15,973	\$51,090	\$3.20	\$3.20

*NPV = net present value discounted at 5 percent

Additional credits need to be made for the City's outstanding sewer revenue bond that expires in 2029.

TABLE 13: CREDIT PER ERU FOR OUTSTANDING BOND

Year	ERUs	Payment	Payment per ERU	NPV*
2023	12,491	\$74,749	\$5.98	\$32.12
2024	12,837	\$74,749	\$5.82	\$27.74
2025	13,192	\$74,749	\$5.67	\$23.31
2026	13,558	\$74,749	\$5.51	\$18.81
2027	13,933	\$74,749	\$5.36	\$14.23
2028	14,319	\$74,749	\$5.22	\$9.58
2029	14,716	\$74,749	\$5.08	\$4.84

Year	ERUs	Payment	Payment per ERU	NPV*
*NPV = net present value discounted at 5 percent				

The credits for the projects benefitting existing development, as well as the credits for the outstanding bond, must be subtracted from the maximum gross fee of \$914.54 to calculate the maximum impact fee per year per ERU and per drainage fixture unit (DFU). Based on Addendum-1 Clearfield City – Culinary Water IFFP Drainage Fixture Unit Calculations from J-U-B Engineers dated April 24, 2023, there are, on average, 21 DFUs per ERU.

TABLE 14: MAXIMUM IMPACT FEE PER ERU OR DFU

	2023	2024	2025	2026	2027	2028	2029	2030
ERU	\$861.15	\$868.28	\$875.51	\$882.84	\$890.28	\$897.86	\$905.58	\$908.51
DFU	\$41.01	\$41.35	\$41.69	\$42.04	\$42.39	\$42.76	\$43.12	\$43.26

Non-Standard Demand Adjustments

The City reserves the right under the Impact Fees Act (Utah Code Ann. § 11-36a-402(1)(c, d)) to assess an adjusted fee to respond to unusual circumstances and to ensure that the impact fees are assessed fairly. The impact fee ordinance should include a provision that permits adjustment of the fee for a development based upon studies and data submitted by the developer that indicate a more realistic and accurate impact on the City's infrastructure.

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.