



LEHI CITY

DRAFT Pressurized Irrigation Impact Fee Analysis

Prepared by:
Zions Public Finance, Inc.
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Executive Summary

Background Information

Zions Public Finance, Inc. (ZPFI) has prepared this Impact Fee Analysis (IFA) for the calculation of appropriate pressurized irrigation (“PI”) impact fees in Lehi City (the “City”). This IFA relies on Lehi’s Pressurized Water Impact Fee Facilities Plan (“IFFP”) prepared in March 2018 and amended December 2023 by Bowen Collins & Associates regarding current system capacity and future pressurized irrigation capital facility needs, cost, and timing.

An impact fee is a one-time fee imposed on new development activity to mitigate the impact of new development on capital facilities. 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 that constitute repair and replacement, cure any existing deficiencies, or increase the level of service for existing users.

Service Area. There is one service area in the City for the purpose of calculating pressurized irrigation (PI) impact fees. This service area corresponds to existing Lehi City boundaries.

Growth Projections. Between 2016 and 2026, the City is expected to grow by 701 irrigated acres or 5,674 equivalent residential units (ERUs). This growth will require the construction of new infrastructure to maintain existing levels of service.

Need for Improvements. The IFFP identifies existing excess capacity in the City’s PI storage and transmission systems. According to the IFFP, new development between 2016 and 2026 will consume 4.4 percent of existing excess capacity in the storage system and 1.7 percent of the transmission system. In addition, the City will need to construct 35 new capital projects in order to keep up with the demands created by new development.

Credits for Projects that Benefit Existing Development. The IFFP identifies a portion of the new construction costs that will benefit existing development. Therefore, a credit must be made so that new development does not pay twice – once in the form of impact fees and then again through higher rates over time to pay for the portion of the system improvements that benefit existing development.

Credits for Outstanding Debt. The City has an outstanding bond, issued in 2019, a portion of which was used to fund pressurized irrigation projects, as well as a 2022 loan issued for PI meters. The PI meters are not considered as part of this analysis.

Impact on Consumption of Existing Capacity

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

There is a total of \$370,413 of existing excess capacity in the City’s PI storage system¹ and \$275,236 in its transmission system² that will be consumed by new development by 2026. The IFFP allocates 98.38 percent

¹ \$364,413 is allocated to PI and \$6,000.70 is allocated to fire flow.

² \$208,712 is allocated to PI and \$66,525 is allocated to fire flow.

of storage capacity to PI and 1.62 percent to fire flow; it allocates 75.83 percent of transmission capacity to PI and 24.17 percent to fire flow. New development in the next 10 years will consume 4.4 percent of the existing excess capacity in storage and 1.7 percent in transmission.

Impact on System Improvements by Anticipated New Development

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

The City has determined to maintain its current level of pressurized irrigation service and therefore new improvements to the system are needed as there is not sufficient excess capacity to maintain current service levels given the projected growth. The system improvements needed over the 10-year planning window have been identified at a total cost of \$42.9 million, of which \$7.3 million can be attributed to new development between 2016 and 2026. Existing development will benefit from \$2.4 million of the costs, with the remaining \$33.2 million attributable to development after 10 years.

Proportionate Share Analysis and Impact Fee Calculation

Utah Code 11-36a-304(1)(d) and (e) and (2)(a) and (b)

New development will be required to pay for its fair share of existing, excess capacity, the construction of new system improvements necessitated by new development, as well as consultant costs. This results in a gross fee that must then be reduced for appropriate credits for new projects that benefit existing development and for a portion of the Series 2019 Water Bond. Each new development will be required to pay both a per irrigated acre fee for pressurized irrigation and an equivalent residential unit (ERU) fee for fire flow.

TABLE 1: SUMMARY OF GROSS IMPACT FEE PER IRRIGATED ACRE (BEFORE CREDITS)

Summary	Per Acre - Irrigation	Per ERU - Fire Flow
Excess Capacity - Storage	\$519.85	\$1.06
Excess Capacity - Transmission Pumping	\$297.73	\$11.72
Interest Costs	\$390.83	\$2.03
New Construction	\$8,401.68	\$255.62
Consultant Costs	\$30.14	\$0.92
Fund Balance	\$0.00	\$0.00
Gross Cost per Unit	\$9,640.23	\$271.35

The maximum allowable impact fee changes each year in the table below in the shaded, far right column, to account for the credits due from the construction costs that benefit existing development and for credits to the Series 2019 Water Bond. The following two tables show the per acre credits and maximum impact fees per acre for pressurized irrigation and the maximum ERU fees for fire flow.

TABLE 2: SUMMARY OF MAXIMUM IMPACT FEE, 2024-2033, FOR PRESSURIZED IRRIGATION

Year	Gross Fee per Irrigated Acre	Projects Benefitting Existing	2019 Bond	Maximum Fee per Irrigated Acre
2024	\$9,640.23	(\$281.27)	(\$773.18)	\$8,585.78
2025	\$9,640.23	(\$269.10)	(\$741.34)	\$8,629.80
2026	\$9,640.23	(\$256.86)	(\$709.48)	\$8,673.90

Year	Gross Fee per Irrigated Acre	Projects Benefitting Existing	2019 Bond	Maximum Fee per Irrigated Acre
2027	\$9,640.23	(\$244.54)	(\$677.35)	\$8,718.34
2028	\$9,640.23	(\$232.14)	(\$645.04)	\$8,763.05
2029	\$9,640.23	(\$219.65)	(\$612.57)	\$8,808.01
2030	\$9,640.23	(\$207.05)	(\$579.97)	\$8,853.21
2031	\$9,640.23	(\$194.33)	(\$547.00)	\$8,898.90
2032	\$9,640.23	(\$181.38)	(\$513.48)	\$8,945.37
2033	\$9,640.23	(\$168.19)	(\$479.42)	\$8,992.63

TABLE 3: SUMMARY OF MAXIMUM IMPACT FEE, 2024-2033, FOR FIRE FLOWS

Year	Gross Fee per ERU	Projects Benefitting Existing	2019 Bond	Maximum Fee per ERU
2024	\$271.35	(\$11.33)	(\$6.74)	\$253.28
2025	\$271.35	(\$10.82)	(\$6.45)	\$254.08
2026	\$271.35	(\$10.31)	(\$6.16)	\$254.87
2027	\$271.35	(\$9.81)	(\$5.88)	\$255.67
2028	\$271.35	(\$9.30)	(\$5.59)	\$256.46
2029	\$271.35	(\$8.79)	(\$5.30)	\$257.26
2030	\$271.35	(\$8.27)	(\$5.01)	\$258.06
2031	\$271.35	(\$7.76)	(\$4.72)	\$258.87
2032	\$271.35	(\$7.23)	(\$4.43)	\$259.69
2033	\$271.35	(\$6.70)	(\$4.13)	\$260.53

Each new development will be required to pay both a per irrigated acre fee for pressurized irrigation and a fire flow fee per ERU. For example, in 2024, the maximum fee for a residential unit with one irrigated acre would be \$8,585.78 plus \$253.28 for a total impact fee of \$8,839.06.

Overview of the Pressurized Irrigation Water Impact Fees

Summary

An impact fee is intended to recover the City’s costs of building pressurized irrigation system capacity to serve new residential and non-residential development rather than passing all 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:

- Excess capacity in the City’s pressurized irrigation system;
- New capital infrastructure for pressurized irrigation systems 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:

- Costs for projects that cure system deficiencies;
- Costs for projects that increase the Level of Service (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 prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. The City has retained ZPFI to prepare this IFA 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 as follows:

- (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.

Calculating Impact Fees

Utah Code states that for purposes of calculating an impact fee, a local political subdivision or private entity may include:

- (a) the construction contract price;
- (b) the cost of acquiring land, improvements, materials, and fixtures;
- (c) the cost for planning, surveying, and engineering fees for services provided for and directly related to the construction of the system improvements; and
- (d) for political subdivision, debt service charges, if the political subdivision might use impact fees as a revenue stream to pay the principal and interest on bonds, notes or other obligations issued to finance the costs of the system improvements.

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.

Impact Fee Enactment

Utah Code states that a local political subdivision or private entity wishing to impose impact fees shall pass an impact fee enactment in accordance with Section 11-36a-402. Additionally, an impact fee imposed by an impact fee enactment may not exceed the highest fee justified by the impact fee analysts. An impact fee enactment may not take effect until 90 days after the day on which the impact fee enactment is approved.

Impact from Growth Upon the City's Facilities and Level of Service

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

Pressurized Irrigation Service Area

The City has one service area for the purpose of calculating pressurized irrigation impact fees which coincides with the boundaries of Lehi City.

Growth in Demand

The City projects that it will grow by approximately 701 pressurized irrigation acres during the 10-year impact fee planning horizon in the IFFP. The following table also shows growth of 5,674 indoor ERUs by 2026.

TABLE 4: IRRIGATION WATER GROWTH PROJECTIONS

Year	Irrigated Acres	Indoor ERUs
2016	3,177	17,849
2017	3,237	18,391
2018	3,297	18,950
2019	3,359	19,526

Year	Irrigated Acres	Indoor ERUs
2020	3,422	20,119
2021	3,494	20,650
2022	3,568	21,195
2023	3,643	21,755
2024	3,720	22,329
2025	3,798	22,918
2026	3,878	23,523
Growth 2016 - 2026	701	5,674

Source: IFFP

Existing and Proposed Level of Service Analysis

The City intends for its proposed service levels to maintain existing performance standards.

TABLE 5: PI SERVICE LEVELS

	Performance Standard	Existing Level of Service	Proposed Level of Service
Production Capacity			
Production Capacity (gpm/irrigated acre)	6.27	5.78	6.27
Pumping Capacity			
Pumping Capacity (gpm/irrigated acre)	5.45	5.78	5.45
Storage			
Storage (gallons/irrigated acre) not including fire storage	7,850	18,612	7,850
Transmission and Distribution			
Peak Day Demand Pressure (psi)	40	36	40
Peak Hour Demand Pressure (psi)	30	29	30
Fire Protection			
Minimum Available Fire Flow at 20 psi during Peak Day Demand (gpm)	1,500	430	1,500

Impact on Capacity from Development Activity

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

Existing Capacity

According to the IFFP, there is currently excess capacity in the pressurized irrigation system. Therefore, new development will be charged a buy-in fee as a part of the proposed pressurized irrigation impact fee.

TABLE 6: EXISTING EXCESS CAPACITY

	Percent to Existing	Percent to 10-Year Growth	Percent to Buildout
Production	100.00%	0.00%	0.00%

	Percent to Existing	Percent to 10-Year Growth	Percent to Buildout
Storage	41.70%	4.40%	53.90%
Transmission Pumping	68.90%	1.70%	29.40%
Source: IFFP			

TABLE 7: EXISTING EXCESS CAPACITY ALLOCATION TO NEW GROWTH BY 2026 - STORAGE

Existing Capacity - Storage	PI	Fire Flow
Actual Cost of Existing System in 2016	\$8,418,484	\$8,418,484
Percent Allocation to PI/Fire Flow	98.38%	1.62%
Percent of Cost to 10-Year Growth	4.40%	4.40%
Cost to 10-Year Growth	\$364,413	\$6,000.70
Source: IFFP; City Asset List; ZPFI		

TABLE 8: EXISTING EXCESS CAPACITY ALLOCATION TO NEW GROWTH BY 2026 - TRANSMISSION

Existing Capacity - Transmission	PI	Fire Flow
Actual Cost of Existing System in 2016	\$16,190,381	\$16,190,381
Percent Allocation to PI/Fire Flow	75.83%	24.17%
Percent of Cost to 10-Year Growth	1.70%	1.70%
Cost to 10-Year Growth	\$208,712	\$66,524.66
Source: IFFP; City Asset List; ZPFI		

System Improvements Required from Development Activity

Utah Code 11-36a-304(1)(b)(c), (2)(b)

Impact on System Improvements by Anticipated New Development

The City has determined to maintain its current level of PI service. Therefore, additional PI improvements will be required to maintain the established PI level of service. The means by which the City will meet growth demands include constructing the following projects as set forth in the IFFP. This will occur through requiring new development to pay for its fair share of new construction projects between 2016 and 2026.

New construction projects between 2016 and 2026 will total \$7,339,950, based on calculations shown in the IFFP and included in the following two tables.

TABLE 9: NEW SYSTEM IMPROVEMENTS

Project Identifier	Estimated Project Year	Estimated Total Cost	Percent to Existing	Percent to 10-Year	Percent to Buildout
IC-04	2020	\$454,000	0.0%	87.7%	12.3%
IC-05	2018	\$31,500	50.4%	4.2%	45.3%
IC-10	2022	\$0	50.4%	2.4%	47.2%
IC-11	2025	\$303,000	50.4%	4.2%	45.3%
IC-12a	2020	\$247,200	0.0%	11.2%	88.8%

Project Identifier	Estimated Project Year	Estimated Total Cost	Percent to Existing	Percent to 10-Year	Percent to Buildout
IC-12b	2025	\$13,262,800	0.0%	11.2%	88.8%
IC-13	2018	\$2,460,069	50.4%	4.2%	45.3%
IC-24	2020	\$10,200	50.4%	2.4%	47.2%
IC-26	2020	\$0	0.0%	0.0%	0.0%
IC-33	2019	\$210,000	50.4%	3.9%	45.7%
IC-34	2019	\$35,700	50.4%	3.9%	45.7%
IC-35	2019	\$8,100	50.4%	3.9%	45.7%
IC-38	2018	\$415,800	41.3%	10.0%	48.7%
IC-39	2022	\$421,000	0.0%	40.6%	59.4%
IC-40	2021	\$989,600	0.0%	40.6%	59.4%
IC-41	2022	\$244,000	0.0%	14.1%	85.9%
IST-1	2022	\$4,500,000	0.0%	1.5%	98.5%
IST-2	2018	\$2,235,841	0.0%	7.7%	92.3%
IST-3	2019	\$3,000,000	0.0%	7.7%	92.3%
IST-4	2024	\$555,000	0.0%	7.7%	92.3%
IST-5	2022	\$2,679,925	0.0%	7.7%	92.3%
IST-6	2025	\$370,000	0.0%	7.7%	92.3%
IST-7	2021	\$266,000	0.0%	14.1%	85.9%
IST-16	2022	\$2,600,000	2.9%	5.9%	91.2%
IS-1	2024	\$173,400	0.0%	78.3%	21.7%
IS-2	2019	\$1,152,500	0.0%	78.3%	21.7%
IS-3	2025	\$173,400	0.0%	78.3%	21.7%
IS-4	2025	\$1,210,500	0.0%	78.3%	21.7%
IS-6	2023	\$1,100,000	2.9%	5.9%	91.2%
IB-1	2018	\$1,204,000	0.0%	87.7%	12.3%
IB-2	2018	\$983,000	41.3%	10.0%	48.7%
IE-1	2024	\$154,100	43.8%	9.7%	46.6%
IE-2	2024	\$154,100	43.8%	9.7%	46.6%
IE-3	2025	\$154,100	43.8%	9.7%	46.6%
SKY-1	2023	\$1,167,319	0.0%	28.8%	71.2%
TOTAL		\$42,926,154			

Source: IFFP

TABLE 10: IMPACT-FEE ELIGIBLE NEW SYSTEM IMPROVEMENTS

Project Identifier	Estimated Project Year	Cost to Existing	Cost to 10-Year Growth	Cost to Beyond 10 Years
IC-04	2020	\$0	\$398,002	\$55,998
IC-05	2018	\$15,892	\$1,337	\$14,271
IC-10	2022	\$0	\$0	\$0
IC-11	2025	\$152,862	\$12,862	\$137,277
IC-12a	2020	\$0	\$27,615	\$219,585
IC-12b	2025	\$0	\$1,481,609	\$11,781,191

Project Identifier	Estimated Project Year	Cost to Existing	Cost to 10-Year Growth	Cost to Beyond 10 Years
IC-13	2018	\$1,241,091	\$104,425	\$1,114,553
IC-24	2020	\$5,146	\$241	\$4,813
IC-26	2020	\$0	\$0	\$0
IC-33	2019	\$105,944	\$8,150	\$95,906
IC-34	2019	\$18,010	\$1,386	\$16,304
IC-35	2019	\$4,086	\$314	\$3,699
IC-38	2018	\$171,845	\$41,483	\$202,472
IC-39	2022	\$0	\$170,832	\$250,168
IC-40	2021	\$0	\$401,557	\$588,043
IC-41	2022	\$0	\$34,370	\$209,630
IST-1	2022	\$0	\$67,500	\$4,432,500
IST-2	2018	\$0	\$171,436	\$2,064,378
IST-3	2019	\$0	\$230,066	\$2,769,934
IST-4	2024	\$0	\$42,562	\$512,438
IST-5	2022	\$0	\$205,519	\$2,474,406
IST-6	2025	\$0	\$28,375	\$341,625
IST-7	2021	\$0	\$37,469	\$228,531
IST-16	2022	\$76,471	\$152,941	\$2,370,588
IS-1	2024	\$0	\$135,720	\$37,680
IS-2	2019	\$0	\$902,057	\$250,443
IS-3	2025	\$0	\$135,720	\$37,680
IS-4	2025	\$0	\$947,454	\$263,046
IS-6	2023	\$32,353	\$64,706	\$1,002,941
IB-1	2018	\$0	\$1,055,494	\$148,506
IB-2	2018	\$406,262	\$98,070	\$478,667
IE-1	2024	\$67,452	\$14,906	\$71,742
IE-2	2024	\$67,452	\$14,906	\$71,742
IE-3	2025	\$67,452	\$14,906	\$71,742
SKY-1	2023	\$0	\$335,960	\$831,359
TOTAL		\$2,432,318	\$7,339,950	\$33,153,858

Source: IFFP

Approximately \$2.4 million of new improvements will benefit existing development and therefore credits will be made in the calculation of the impact fees so that new development does not pay twice.

A further allocation is made for fire flow costs which include the following distribution between pressurized irrigation and fire flow for new projects.

TABLE 11: ALLOCATION OF NEW IMPROVEMENT COSTS TO PI AND FIRE FLOW

Category	Replacement Value (2016 Dollars)	Percent to Irrigation	Percent to Fire Protection
Production	\$33,465,000	100.00%	0.00%

	Category Replacement Value (2016 Dollars)	Percent to Irrigation	Percent to Fire Protection
Pumping	\$8,151,000	100.00%	0.00%
Storage	\$19,704,000	98.38%	1.62%
Transmission	\$275,141,000	75.83%	24.17%
Cost Weighted Average	\$336,461,000	80.24%	19.76%

Source: IFFP

Relation of Anticipated Development Activity to Impacts on System Improvements

The demand placed on existing pressurized irrigation improvements by new development activity is attributed to the increased pressurized irrigated acres related to both residential and nonresidential growth.

Proportionate Share Analysis

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

Maximum Legal Pressurized Irrigation Impact Fee

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the existing excess capacity and future costs for system improvements that benefit new growth that can be recouped through impact fees.

Buy-in to Existing, Excess Capacity

The existing pressurized irrigation system has existing, excess capacity; therefore, a buy-in component is factored into the impact fee calculation.

TABLE 12: PROPORTIONATE SHARE ANALYSIS, EXCESS EXISTING CAPACITY ANALYSIS FOR STORAGE

Storage	PI	Fire Flow
Cost of Existing System - 2016	\$8,418,484	\$8,418,484
Percent to Irrigation	98.38%	1.62%
Percent of Cost to 10-Year Growth	4.40%	4.40%
Cost to 10-Year Growth	\$364,413	\$6,000.70
Growth 2016-2026	701	5,674
Cost per Acre/ERU	\$519.85	\$1.06

TABLE 13: PROPORTIONATE SHARE ANALYSIS, EXCESS EXISTING CAPACITY ANALYSIS FOR TRANSMISSION

Transmission Pumping	PI	Fire Flow
Cost of Existing System	\$16,190,381	\$16,190,381
Percent to Irrigation	75.83%	24.17%
Percent of Cost to 10-Year Growth	1.70%	1.70%
Cost to 10-Year Growth	\$208,712	\$66,524.66
Growth 2016-2026	701	5,674

Transmission Pumping	PI	Fire Flow
Cost per Acre/ERU	\$297.73	\$11.72

Much of the existing excess capacity is being paid for through the Series 2019 bond issued for \$17,205,000. Therefore, new development can also be charged the bond interest costs associated with the projects that have existing excess capacity that will benefit new development by 2026.

TABLE 14: ALLOCATION OF BOND COSTS

2019 Bonds spent as follows:	Cost	Storage	Transmission
Dry Creek PI Reservoir (Press Irrig) Storage	\$3,298,925	\$3,298,925	
West Side Sediment Basin (Press Irrig)	\$2,868,262	\$2,868,262	
Sandpit Transmission Line (Culinary) Transmission	\$2,561,858		
Sandpit Transmission Line (Press Irrig) Transmission	\$2,480,926	\$1,630,926	\$850,000
Sandpit Tank/Pump (Culinary)	\$3,605,851		
600 E. Tank Replacement (Culinary) Storage	\$3,164,525		
Press Irrig Meters (Press Irrig)	\$1,478,668		
TOTAL	\$19,459,015	\$7,798,113	\$850,000

Source: Lehi City; ZPFI

TABLE 15: ALLOCATION OF BOND INTEREST COSTS

INTEREST COSTS ADDED FOR 2019 BONDS	% of Bond	Interest Cost to 10 Yrs*	Interest Costs Allowable
Total Interest Cost		\$13,737,930.83	
Total Principal Amount		\$17,205,000.00	
Total PI Amt to Storage	45%	\$7,798,113.00	\$273,973.68
Total PI Amt to Transmission	5%	\$850,000.00	\$11,538.11
TOTAL Interest Costs Allowable			\$285,511.79

*Based on the existing excess capacity consumed by new development by 2033 as shown in Table 5

TABLE 16: PROPORTIONATE SHARE ANALYSIS OF INTEREST COSTS ON SERIES 2019 BOND

Interest Costs on 2019 Bond	PI	Fire Flow
Total Interest Costs	\$285,511.79	\$285,511.79
Total Interest Allocation	\$273,973.68	\$11,538.11
Growth 2016-2026	701	5,674
Cost per Unit	\$390.83	\$2.03

New Construction

The City intends to maintain its existing PI level of service by constructing new system improvements previously detailed in this IFA. Total impact fee eligible costs for new construction, attributable to new development over the next 10 years, are \$7,339,950. Based on the acres served over the next 10 years, the total cost per acre for new improvements is \$8,401.68 and \$255.62 per ERU.

TABLE 17: PROPORTIONATE SHARE ANALYSIS, NEW CONSTRUCTION NECESSITATED BY NEW DEVELOPMENT

Description	PI	Fire Flow
New Construction Cost 10-Yr Growth	\$7,339,950	\$7,339,950
% Allocation PI/Fire Flow	80.24%	19.76%
New Construction Cost 10-Yr Growth	\$5,889,576	\$1,450,374
Growth 2016-2026	701	5,674
Cost per Acre/ERU	\$8,401.68	\$255.62

Consultant Costs

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

Consultant costs are estimated at \$26,330 to prepare the IFFP and IFA that was necessary to calculate defensible impact fees. The consultant studies are considered to serve development over the next 10 years. Based on the acres served over the next 10 years, the total consultant cost is calculated at \$30.14 per irrigated acre and \$0.92 per ERU.

TABLE 18: PROPORTIONATE SHARE ANALYSIS, CONSULTANT COSTS

Description	PI	Fire Flow
Total Consultant Costs	\$26,330	\$26,330
% Allocation PI/Fire Flow	80.24%	19.76%
Cost Allocation	\$21,127	\$5,203
Growth 2016-2026	701	5,674
Cost per Acre/ERU	\$30.14	\$0.92

Impact Fee Fund Balance

The City currently has no fund balance in its pressurized irrigation fund and therefore no credits need to be made.

Credits for Projects Benefitting Existing Development

Credits need to be made for the portion of new projects that will benefit existing development and for the outstanding 2019 bond. The 2022 loan is for PI meters which will raise service levels and which have not been considered as part of the impact fee analysis.

The IFFP identifies a total of \$2,432,318 of new construction projects that will benefit existing development. Therefore, a credit is necessary and is made by averaging the cost over 20 years and then dividing by the number of irrigated acres that will be making higher rate payments to offset these costs. The last step in calculating the credit is to take the net present value (NPV) of the future payments that benefit new development. This credit will then be applied against the gross impact fee.

TABLE 19: COST ALLOCATION OF NEW IMPROVEMENT PROJECTS THAT BENEFIT EXISTING DEVELOPMENT

	PI	Fire Flow
Cost Benefitting Existing	\$2,432,318	\$2,432,318

	PI	Fire Flow
Cost Allocation Percentage	80.24%	19.76%
Total Cost Allocation	\$1,951,692	\$480,626
Number of Years	20	20
Payment per Year	\$97,584.60	\$24,031.30

Source: IFFP; ZPFI

TABLE 20: CREDITS FOR PAYMENTS BENEFITTING EXISTING DEVELOPMENT – PRESSURIZED IRRIGATION

Year	Payment	Acres	Payment per Irrigated Acre	NPV*
2024	\$97,584.60	3,720	\$26.24	\$281.27
2025	\$97,584.60	3,798	\$25.69	\$269.10
2026	\$97,584.60	3,878	\$25.16	\$256.86
2027	\$97,584.60	3,963	\$24.62	\$244.54
2028	\$97,584.60	4,050	\$24.10	\$232.14
2029	\$97,584.60	4,138	\$23.58	\$219.65
2030	\$97,584.60	4,229	\$23.08	\$207.05
2031	\$97,584.60	4,305	\$22.67	\$194.33
2032	\$97,584.60	4,383	\$22.26	\$181.38
2033	\$97,584.60	4,463	\$21.87	\$168.19
2034	\$97,584.60	4,543	\$21.48	\$154.73
2035	\$97,584.60	4,625	\$21.10	\$140.98
2036	\$97,584.60	4,709	\$20.72	\$126.94
2037	\$97,584.60	4,794	\$20.35	\$112.56
2038	\$97,584.60	4,881	\$19.99	\$97.83
2039	\$97,584.60	4,969	\$19.64	\$82.73
2040	\$97,584.60	5,059	\$19.29	\$67.23
2041	\$97,584.60	5,120	\$19.06	\$51.30
2042	\$97,584.60	5,182	\$18.83	\$34.81
2043	\$97,584.60	5,245	\$18.61	\$17.72

*NPV = net present value discounted at 5 percent

TABLE 21: CREDITS FOR PAYMENTS BENEFITTING EXISTING DEVELOPMENT – FIRE FLOWS

Year	Payment	ERUs	Payment per ERU	NPV*
2024	\$24,031.30	22,329	\$1.08	\$11.33
2025	\$24,031.30	22,918	\$1.05	\$10.82
2026	\$24,031.30	23,523	\$1.02	\$10.31
2027	\$24,031.30	24,068	\$1.00	\$9.81
2028	\$24,031.30	24,625	\$0.98	\$9.30
2029	\$24,031.30	25,195	\$0.95	\$8.79
2030	\$24,031.30	25,779	\$0.93	\$8.27
2031	\$24,031.30	26,294	\$0.91	\$7.76

Year	Payment	ERUs	Payment per ERU	NPV*
2032	\$24,031.30	26,820	\$0.90	\$7.23
2033	\$24,031.30	27,355	\$0.88	\$6.70
2034	\$24,031.30	27,902	\$0.86	\$6.15
2035	\$24,031.30	28,460	\$0.84	\$5.60
2036	\$24,031.30	29,028	\$0.83	\$5.03
2037	\$24,031.30	29,608	\$0.81	\$4.46
2038	\$24,031.30	30,200	\$0.80	\$3.87
2039	\$24,031.30	30,803	\$0.78	\$3.27
2040	\$24,031.30	31,419	\$0.76	\$2.65
2041	\$24,031.30	31,942	\$0.75	\$2.02
2042	\$24,031.30	32,474	\$0.74	\$1.37
2043	\$24,031.30	33,014	\$0.73	\$0.69

*NPV = net present value discounted at 5 percent

Credits for Outstanding Bond, Series 2019

The City has an outstanding Water Revenue Bond (Secondary Water Schedule), Series 2019 that was issued for \$17,205,000. The amount of the outstanding bond allocated to storage and transmission was shown previously in Table 14. The portion of the bonds that benefit existing development must be credited so that new development does not pay twice – once in the form of an impact fee and then, over time, through higher rates.

TABLE 22: BOND ALLOCATION TO EXISTING DEVELOPMENT

CREDITS - 2019 BOND	PI	Fire Flow
Storage - 2019 Bond to PI	\$7,798,113	\$7,798,113
Allocation Percent	98.38%	1.62%
Allocated Costs	\$7,671,784	\$126,329
% to Existing	41.70%	41.70%
Amt to Existing	\$3,199,134	\$52,679
Total Amt of Bond	\$17,205,000	\$17,205,000
% to be Credited	18.59%	0.31%
Transmission - 2019 Bond to PI	\$850,000	\$850,000
Allocation Percent	75.83%	24.17%
Allocated Costs	\$644,555	\$205,445
% to Existing	68.90%	68.90%
Amt to Existing	\$444,098	\$141,552
Total Amt of Bond	\$17,205,000	\$17,205,000
% to be Credited	2.6%	0.8%
TOTAL % of Bond to be Credited	21.18%	1.13%

Therefore, new development needs to be credited for 18.59 percent of the storage projects covered by the bond and for 2.6 percent of the transmission projects, for a total credit of 21.18 percent of future bond payments that are related to pressurized irrigation. It will also need to be credited for 0.31 percent of storage projects and 0.8 percent of transmission projects, for a total of 1.13 percent of future bond payments that are related to fire flow.

TABLE 23: CREDITS FOR PROJECTS BENEFITTING EXISTING DEVELOPMENT ON OUTSTANDING BOND – PRESSURIZED IRRIGATION

2019 Bond	2019 P + I	Payment Amount Benefitting Existing	Irrigated Acres	Payment per Irrigated Acre	NPV*
2024	\$1,238,500	\$262,257.66	3,720	\$70.51	\$773.18
2025	\$1,236,250	\$261,781.21	3,798	\$68.93	\$741.34
2026	\$1,238,000	\$262,151.78	3,878	\$67.60	\$709.48
2027	\$1,238,500	\$262,257.66	3,963	\$66.18	\$677.35
2028	\$1,237,750	\$262,098.84	4,050	\$64.72	\$645.04
2029	\$1,235,750	\$261,675.33	4,138	\$63.23	\$612.57
2030	\$1,237,500	\$262,045.90	4,229	\$61.96	\$579.97
2031	\$1,237,750	\$262,098.84	4,305	\$60.88	\$547.00
2032	\$1,236,500	\$261,834.15	4,383	\$59.73	\$513.48
2033	\$1,238,750	\$262,310.60	4,463	\$58.78	\$479.42
2034	\$1,239,250	\$262,416.47	4,543	\$57.76	\$444.61
2035	\$1,238,000	\$262,151.78	4,625	\$56.68	\$409.08
2036	\$1,240,000	\$262,575.29	4,709	\$55.76	\$372.86
2037	\$1,235,000	\$261,516.52	4,794	\$54.55	\$335.74
2038	\$1,238,250	\$262,204.72	4,881	\$53.72	\$297.98
2039	\$1,239,250	\$262,416.47	4,969	\$52.81	\$259.16
2040	\$1,238,000	\$262,151.78	5,059	\$51.82	\$219.31
2041	\$1,239,500	\$262,469.41	5,120	\$51.26	\$178.45
2042	\$1,238,500	\$262,257.66	5,182	\$50.61	\$136.12
2043	\$1,235,000	\$261,516.52	5,245	\$49.86	\$92.31
2044	\$1,239,000	\$262,363.54	5,308	\$49.42	\$47.07

*NPV = net present value discounted at 5 percent
 Source: Lehi City; ZPFI

TABLE 24: CREDITS FOR PROJECTS BENEFITTING EXISTING DEVELOPMENT ON OUTSTANDING BOND – FIRE FLOW

2019 Bond - Fire Flow Portion	2019 P + I	Payment Amt Benefitting Existing	ERUs	Payment per ERU	NPV*
2024	\$1,238,500	\$13,981.70	22,329	\$0.63	\$6.74
2025	\$1,236,250	\$13,956.29	22,918	\$0.61	\$6.45
2026	\$1,238,000	\$13,976.05	23,523	\$0.59	\$6.16
2027	\$1,238,500	\$13,981.70	24,068	\$0.58	\$5.88
2028	\$1,237,750	\$13,973.23	24,625	\$0.57	\$5.59
2029	\$1,235,750	\$13,950.65	25,195	\$0.55	\$5.30
2030	\$1,237,500	\$13,970.41	25,779	\$0.54	\$5.01
2031	\$1,237,750	\$13,973.23	26,294	\$0.53	\$4.72

2019 Bond - Fire Flow Portion	2019 P + I	Payment Amt Benefitting Existing	ERUs	Payment per ERU	NPV*
2032	\$1,236,500	\$13,959.12	26,820	\$0.52	\$4.43
2033	\$1,238,750	\$13,984.52	27,355	\$0.51	\$4.13
2034	\$1,239,250	\$13,990.16	27,902	\$0.50	\$3.82
2035	\$1,238,000	\$13,976.05	28,460	\$0.49	\$3.51
2036	\$1,240,000	\$13,998.63	29,028	\$0.48	\$3.20
2037	\$1,235,000	\$13,942.18	29,608	\$0.47	\$2.87
2038	\$1,238,250	\$13,978.87	30,200	\$0.46	\$2.55
2039	\$1,239,250	\$13,990.16	30,803	\$0.45	\$2.21
2040	\$1,238,000	\$13,976.05	31,419	\$0.44	\$1.87
2041	\$1,239,500	\$13,992.98	31,942	\$0.44	\$1.52
2042	\$1,238,500	\$13,981.70	32,474	\$0.43	\$1.15
2043	\$1,235,000	\$13,942.18	33,014	\$0.42	\$0.78
2044	\$1,239,000	\$13,987.34	33,564	\$0.42	\$0.40

*NPV = net present value discounted at 5 percent
 Source: Lehi City; ZPFI

Summary of Impact Fees

The calculated maximum cost per acre, before credits, is \$9,640.23 as shown in Table 25 below and \$271.35 per ERU.

TABLE 25: SUMMARY OF GROSS IMPACT FEE

Summary	Per Irrigated Acre	Per ERU - Fire Flow
Excess Capacity - Storage	\$519.85	\$1.06
Excess Capacity - Transmission Pumping	\$297.73	\$11.72
Interest Costs	\$390.83	\$2.03
New Construction	\$8,401.68	\$255.62
Consultant Costs	\$30.14	\$0.92
Fund Balance	\$0.00	\$0.00
Gross Cost per Unit	\$9,640.23	\$271.35

The maximum allowable impact fee changes each year in the table below to account for the credits due from the remaining construction costs that benefit existing development and for the remaining payments on the Series 2019 Bond.

TABLE 26: SUMMARY OF MAXIMUM IMPACT FEE, 2024-2033- PRESSURIZED IRRIGATION

Year	Gross Fee per Irrigated Acre	Projects Benefitting Existing	2019 Bond	Maximum Fee per Irrigated Acre
2024	\$9,640.23	(\$281.27)	(\$773.18)	\$8,585.78
2025	\$9,640.23	(\$269.10)	(\$741.34)	\$8,629.80
2026	\$9,640.23	(\$256.86)	(\$709.48)	\$8,673.90
2027	\$9,640.23	(\$244.54)	(\$677.35)	\$8,718.34

Year	Gross Fee per Irrigated Acre	Projects Benefitting Existing	2019 Bond	Maximum Fee per Irrigated Acre
2028	\$9,640.23	(\$232.14)	(\$645.04)	\$8,763.05
2029	\$9,640.23	(\$219.65)	(\$612.57)	\$8,808.01
2030	\$9,640.23	(\$207.05)	(\$579.97)	\$8,853.21
2031	\$9,640.23	(\$194.33)	(\$547.00)	\$8,898.90
2032	\$9,640.23	(\$181.38)	(\$513.48)	\$8,945.37
2033	\$9,640.23	(\$168.19)	(\$479.42)	\$8,992.63

TABLE 27: SUMMARY OF MAXIMUM IMPACT FEE, 2024-2033- FIRE FLOW

Year	Gross Fee per ERU	Projects Benefitting Existing	2019 Bond	Maximum Fee per ERU
2024	\$271.35	(\$11.33)	(\$6.74)	\$253.28
2025	\$271.35	(\$10.82)	(\$6.45)	\$254.08
2026	\$271.35	(\$10.31)	(\$6.16)	\$254.87
2027	\$271.35	(\$9.81)	(\$5.88)	\$255.67
2028	\$271.35	(\$9.30)	(\$5.59)	\$256.46
2029	\$271.35	(\$8.79)	(\$5.30)	\$257.26
2030	\$271.35	(\$8.27)	(\$5.01)	\$258.06
2031	\$271.35	(\$7.76)	(\$4.72)	\$258.87
2032	\$271.35	(\$7.23)	(\$4.43)	\$259.69
2033	\$271.35	(\$6.70)	(\$4.13)	\$260.53

Each new development will be required to pay both a per irrigated acre fee for pressurized irrigation and a fire flow fee per ERU. For example, in 2024, the maximum fee for a residential unit with one irrigated acre would be \$8,585.78 plus \$253.28 for a total impact fee of \$8,839.06.

Manner of Financing, Credits, Etc.

Utah Code 11-36a-304(2)(c)(d)(e)(f)(g) and (h)

An impact fee is a one-time fee that is implemented by a local government on new development to fund and pay for the proportionate costs of public facilities (system improvements) that are needed to serve new development. As a matter of policy and legislative discretion, a City may choose to have new development pay the full cost of its proportionate share of new public facilities and existing facilities that have excess capacity to service new development through impact fees. Alternatively, local governments may elect to subsidize new development by using other sources of revenue (user charges, special assessments, bonds, taxes, grants) to pay for the new facilities required to service new development and use impact fees to recover the cost difference between the total cost of the new facilities and the other sources of revenue.

At the current time, no other sources of funding other than impact fees have been identified, but to the extent that any are identified and received in the future, then impact fees will be reduced accordingly. The City has found that it is necessary to charge an impact fee to maintain the existing level of service into the future.

Additional system improvements beyond those funded through impact fees that are desired to raise the level of service will be paid for by the community through other revenue sources such as user charges, special assessments, General Obligation bonds, general taxes, etc.

Impact Fee Credits

The Impact Fee Act requires that the IFA consider the relative extent to which new development activity will contribute to financing the excess capacity of and system improvements for new and public facilities, by such means as user charges, special assessments, or payment from the proceeds of general taxes so that new development is not charged twice. This IFA clearly identifies the amount of excess capacity to be paid for by new development. This portion of the impact fee calculation can be credited back to the Utility Fund as a repayment for prior investment in capital facilities.

In terms of new facilities, all impact fee amounts collected must be spent for the specific project improvements identified by the engineering firm contracted by the City and incorporated into this IFA. Impact fees are required to be used within 6 years of collection. No user fees, special assessments, etc., are contemplated to offset any of the costs associated with the new pressurized irrigation facilities.

Credits may also be paid back to developers who have constructed or directly funded system improvements that are identified by the City's contracted engineering firm or donated to the City in lieu of impact fees, including the dedication of land for system improvements. This situation does not apply to developer exactions for project improvements. Any item for which a developer receives credit should be included in the approved infrastructure and must be agreed upon with the City before construction begins.

The standard impact fee can also be adjusted to respond to unusual circumstances in specific cases to ensure that impact fees are imposed fairly. In certain cases, a developer may submit studies and data that clearly show a need for adjustment.

Certification

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

1. Includes only the costs 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. costs 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. Offsets costs with grants or other alternate sources of payment; and
4. Complies in each and every relevant respect with the Impact Fees Act.