

SANITARY SEWER IMPACT FEE ANALYSIS (IFA)



NOTICE
DRAFT

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SUBMITTED BY:
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IMPACT FEE CERTIFICATION

Lewis Young Robertson & Burningham, Inc. certifies that the Impact Fee Analysis ("IFA") prepared for culinary water services:

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;
 - 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;
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
 - d. offsets costs with grants or other alternate sources of payment; and
3. complies in each and every relevant respect with the Impact Fees Act.

Lewis Young Robertson & Burningham, Inc. makes this certification with the following caveats:

1. All of the recommendations for implementation of the IFFP made in the IFFP documents or in the IFA documents are followed by City Staff and elected officials.
2. If all or a portion of the IFFP or IFA are modified or amended, this certification is no longer valid.
3. All information provided to LYRB is assumed to be correct, complete, and accurate. This includes information provided by the City as well as outside sources.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

DEFINITIONS

The following acronyms or abbreviations are used in this document:

ERC:	Equivalent Residential Connection
GAL:	Gallons
GPM:	Gallons per Minute
GPD:	Gallons per Day
GPDP:	Gallons per Day per Capita
IFA:	Impact Fee Analysis
IFFP:	Impact Fee Facilities Plan
LOS:	Level of Service
LYRB:	Lewis Young Robertson and Burningham, Inc.
MG:	Million Gallons

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SECTION 1: EXECUTIVE SUMMARY

The purpose of the Sanitary Sewer Impact Fee Analysis (“IFA”) is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the “Impact Fees Act,” and help Eagle Mountain City (the “City”) plan necessary capital improvements for future growth. This document will determine the appropriate impact fee the City may charge to new growth to maintain the level of service (“LOS”) for the sanitary sewer system. The **Eagle Mountain Sewer Capital Facilities Plan and Impact Fee Facilities Plan 2015** (the “IFFP”), along with information from the City, provides the information utilized in the analysis for the purposes of calculating impact fees.

- ☒ **Impact Fee Service Areas:** There are three defined service areas within the IFFP: the North Service Area (“NSA”), South Service Area (“SSA”) and West Service Area (“WSA”). The impact fees related to sanitary sewer are calculated only for the NSA and SSA.
- ☒ **Demand Analysis:** The demand unit utilized in this analysis is equivalent residential connections (ERCs). As residential and commercial growth occurs within the City, it generates an impact on the sanitary sewer system. The capital improvements identified in this study are based on maintaining the current level of service.
- ☒ **Level of Service:** This analysis identifies the current level of service which is provided to the City’s existing residents and ensures that future facilities maintain these standards. The IFFP states the Level of Service (LOS) is 60 gallons per day per capital (gpdpc) and 4.06 people per connection, resulting in 244 gpd/ERC.
- ☒ **Excess Capacity:** This analysis includes a buy-in component for applicable reimbursement agreements and special improvement district (SID) projects. In addition, a buy-in is calculated for the excess treatment plant capacity. A total of \$7,323,057 is allocated as a buy-in component related to treatment in the SSA. The intent of the equity buy-in component is to recover the costs of the unused capacity in existing infrastructure from new development.
- ☒ **Capital Facilities Analysis:** The IFFP has identified the growth related projects needed within the next six years. **SSA Treatment:** A total of \$712,500 has been included in the fee calculation for the SSA related to new treatment needs. **SSA Collection:** A total of \$4,243,486 has been identified as future impact fee eligible collection capital projects for the SSA. **NSA Treatment:** Wastewater in the NSA flows to and is treated by the Timpanogos Special Service District. The City does not assess an impact fee to the NSA for treatment. **NSA Collection:** A total of \$2,318,548 has been identified as future impact fee eligible capital projects related to the NSA collection system within the next six years.
- ☒ **Financing of Existing & Future Facilities:** The City has funded its existing capital infrastructure through a combination of different revenue sources, including general utility fund revenues, the issuance of debt, SIDs, reimbursement agreements and revenues received from other governmental agencies. The existing reimbursement agreements, City funded projects and SID payments can be repaid from impact fee revenues from the system. The future capital projects that will be constructed to cure the existing system deficiencies will be funded through user rate revenues. All other capital projects within the next six years which are intended to serve new growth will be funded through sanitary sewer impact fees or on a pay-as-you-go approach. Thus, costs associated with future debt are not included in the Impact Fee Analysis.

PROPORTIONATE SHARE ANALYSIS

The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the new growth served by the proposed projects. The impact fee per ERC is calculated below for each proposed service area.

TABLE 1.1: PROPORTIONATE SHARE ANALYSIS

NSA	EST. ACTUAL COST	IF ELIGIBLE	IFA COSTS	ERCs SERVED	FEE PER ERC
Collection IFFP Cost	\$2,318,548	100%	\$2,318,548	4,393	\$528
Treatment IFFP Cost*	NA	NA	NA	NA	NA
Impact Fee Fund Balance	(\$381,291)	100%	(\$381,291)	4,393	(\$87)
Professional Expense	\$3,950	100%	\$3,950	1,064	\$4
Total	\$1,941,208		\$1,941,208		\$445

*Treatment provided by Timpanogos Special Service District

SSA	Est. Actual Cost	IF Eligible	IFA Costs	ERCs Served	Fee Per ERC
Collection IFFP Cost	\$4,243,486	100%	\$4,243,486	3,301	\$1,286
Treatment Buy-In*	\$9,764,076	75%	\$7,323,057	3,695	\$1,982
Treatment IFFP Cost	\$712,500	100%	\$712,500	3,695	\$193
Impact Fee Fund Balance	(\$381,291)	100%	(\$381,291)	3,301	(\$116)
Professional Expense	\$3,950	100%	\$3,950	1,175	\$3
Total	\$14,342,721		\$11,901,702		\$3,348

*The estimate of ERCs served by the existing treatment plant is based on the total processing capacity of 1.2 MGD which should serve 4,926 ERCs (based on 244 gallons per day/ERC). Since the facility has 75 percent available capacity, the value of the excess capacity will serve 3,695 ERCs (75 percent of the total).



COMBINED SEWER IMPACT FEE SUMMARY

The combined impact fee, including the applicable buy-in component, is illustrated in Table 1.2.

TABLE 1.2: COMBINED SEWER IMPACT FEE SUMMARY

	BUY-IN					Future Facilities	Treatment	Total Per ERC
	98-1	PLANT PROPERTY BUY-IN	EVANS RANCH EXTENSION	RANCHES PKWY EXTENSION	CAMP WILLIAMS LINE			
North Service Area	\$433.61	-	\$333.73	\$1.33	\$28.65	\$444.72	\$2,475.00*	\$3,717.04
South Service Area	-	\$113.68	-	-	-	\$1,366.22	\$1,982.11	\$3,462.01

*Treatment Fee in NSA assessed by Timpanogos Special Improvement District and is subject to change by TSSD.

NON-STANDARD SANITARY SEWER IMPACT FEES

The City reserves the right under the Impact Fees Act¹ to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City's culinary water system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category.

MULTI-FAMILY EQUIVALENCY CONVERSION

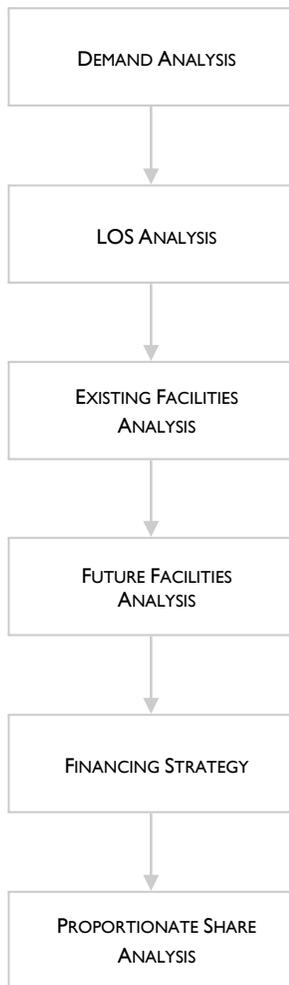
According to the City, an adjustment factor of .8 will be applied to the estimated fee per ERC for multi-family units. Multi-family units are housing units with three or more attached units.

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¹ 11-36a-402(1)(c)

SECTION 2: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE METHODOLOGY



The purpose of this study is to fulfill the requirements of the Impact Fees Act regarding the establishment of an IFFP and IFA. The IFFP is designed to identify the demands placed upon the City's existing 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 are intended to be funded by impact fees. The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service. The following elements are important considerations when completing an IFFP and IFA.

DEMAND ANALYSIS

The demand analysis serves as the foundation for the IFFP. This element focuses on a specific demand unit related to each public service – the existing demand on public facilities and the future demand as a result of new development that will impact public facilities.

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing "Level of Service" ("LOS"). Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the level of service which is provided to a community's existing residents and ensures that future facilities maintain these standards. Any excess capacity identified within existing facilities can be apportioned to new development. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, to the extent possible the Impact Fee Facilities Plan provides an inventory of the City's existing system facilities. The inventory valuation should include the original construction cost and estimated useful life of each facility of each facility. The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

FUTURE CAPITAL FACILITIES ANALYSIS

The demand analysis, existing facility inventory and LOS analysis allow for the development of a list of capital projects necessary to serve new growth and to maintain the existing system. This list includes any excess capacity of existing facilities as well as future system improvements necessary to maintain the level of service. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

FINANCING STRATEGY

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.² In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.³

PROPORTIONATE SHARE ANALYSIS

The written impact fee analysis is required under the Impact Fees Act and must identify the impacts placed on the facilities by development activity and how these impacts are reasonably related to the new development. The written impact fee analysis must include a proportionate share analysis, clearly detailing each cost component and the methodology used to calculate each impact fee. A local political subdivision or private entity may only impose impact fees on development activities when its plan for financing system improvements establishes that impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future (UCA 11-36a-302).

² 11-36a-302(2)

³ 11-36a-302(3)



SECTION 3: OVERVIEW OF SERVICE AREA, DEMAND AND LEVEL OF SERVICE

SERVICE AREAS

There are three defined service areas within the IFFP: the North Service Area ("NSA"), South Service Area ("SSA") and West Service Area ("WSA"). The impact fees related to sanitary sewer include the NSA and SSA. The NSA and SSA will be divided at Unity Pass, with the WSA incorporating the Pole Canyon area, which includes nearly 3,000 acres of land for residential, commercial, and industrial development.

DEMAND UNITS

The City's projected increase in ERCs is shown below.⁴

TABLE 3.1: POPULATION PROJECTIONS

YEAR	MGD	ERCs	MGD	ERCs	% ADDED
	NSA		SSA		
2015	1.08	4,440	0.88	3,590	5%
2016	1.13	4,620	0.92	3,770	5%
2017	1.17	4,800	0.96	3,950	5%
2018	1.21	4,980	1.01	4,130	5%
2019	1.26	5,160	1.05	4,310	4%
2020	1.30	5,340	1.10	4,490	4%
2021	1.34	5,504	1.16	4,765	6%
2022	1.43	5,875	1.28	5,237	10%
2023	1.53	6,261	1.40	5,745	10%
2024	1.62	6,656	1.53	6,287	9%
2025	1.71	7,025	1.67	6,831	9%
2026	1.80	7,374	1.80	7,382	8%
2027	1.87	7,696	1.93	7,931	7%
2028	1.94	7,981	2.06	8,466	7%
2029	2.01	8,261	2.20	9,022	7%
2030	2.08	8,542	2.34	9,604	6%
2060	3.22	13,199	8.28	33,939	
6 Year Growth Estimates		1,064		1,175	
IFFP Planning Horizon		2,585		3,241	
Build Out		8,759		30,349	

LEVEL OF SERVICE

The IFFP states the Level of Service (LOS) is 60 gpdpc and 4.06 people per connection, resulting in 244 gpd/ERC.⁵ This is based on water use records for the NSA and SSA. During this update, more accurate water data was available for analysis in the SSA. As a result, analysis indicates SSA use is very similar to the NSA.

⁴ See IFFP p.16

⁵ See IFFP p.7-8

SECTION 4: EXISTING FACILITIES INVENTORY

EXCESS CAPACITY & BUY-IN

The intent of the equity buy-in component is to recover the costs of the unused capacity in existing infrastructure from new development. The following paragraphs illustrate the appropriate buy-in component related to excess capacity within the existing system.

EXISTING COLLECTION BUY-IN

The determination of a buy-in component related to collection infrastructure in each service area is based on the applicable SID projects and reimbursement agreements, as illustrated in Tables 4.1 and 4.2. The remaining capacity served by the SID projects is 2,758. Future impact fee revenues can be used to pay off the remaining value associated with repayment schedules outlined below. For additional information, see IFFP p.12.

TABLE 4.1: SEWER PROJECTS FOR SPECIAL IMPROVEMENT DISTRICTS (SIDs)

NAME	YEAR	PROJECT NAME	ORIGINAL COST	ORIGINAL CAPACITY (ERCs)	REMAINING CAPACITY	COST PER ERU	EXCESS CAPACITY (OUTSIDE SID)
98-1	1998	Ranches Sewer 98-1	\$8,600	6,300	2,788	\$1.37	759
98-1	1998	Ranches Sewer 98-1 TSSD	\$2,723,110	6,300	2,788	\$432.24	759
Total			\$2,731,710			\$433.60	

TABLE 4.2: EXISTING REIMBURSEMENT AGREEMENTS

YEAR	ITEM DESCRIPTION	TOTAL COST	ORIGINAL CAPACITY (ERCs)	USED CAPACITY	REMAINING CAPACITY	VALUE OF REMAINING	COST PER ERC
1998	SSA Waste Water Treatment Plant Property	\$397,880	3,500	82	3,418	388,558	\$113.68
2015	Evans Ranch Trunk Line	\$1,019,217	3,054	713	2,341	781,266	\$333.73
2015	Ranches Parkway Extension	\$12,578	9,415	-	9,415	12,578	\$1.33
2015	Camp Williams Sewer Lines	\$41,715	1,456	-	1,456	41,715	\$28.65

EXISTING TREATMENT BUY-IN

The sewer impact fees calculated in this analysis for the NSA are for the NSA's sewer collection systems and do not include the costs of sewer treatment, as the wastewater in the NSA flows to, and is treated by, the Timpanogos Special Service District. No buy-in component is contemplated for treatment in the NSA. Thus, the impact fees calculated herein only consider a treatment buy-in component for the SSA. The buy-in component is calculated using the existing reimbursement schedule as presented in the IFFP and based on information provided by the City. The impact fees include the City and State bonding amounts, as well as the impact fee revenues.

TABLE 4.3: EXISTING TREATMENT INFRASTRUCTURE

PROJECT DESCRIPTION	TOTAL COST	CITY (BOND)	STAG GRANT	STATE LOAN	IMPACT FEES	WASTEWATER FUND	REIMBURSED AMOUNT
1.2 MGD SSA WWTF	\$9,364,256	\$1,189,202	\$500,000	\$6,665,000	\$942,651	\$67,403	\$8,864,256
SSA WWTF Engineering Services	\$567,435	\$529,020	-	-	-	-	-
SSA WWTF Land Purchase	\$2,325,000	\$2,325,000	-	-	-	-	-
Total Impact Fee Qualifying Buy In	\$12,256,691	\$4,043,222	\$500,000	\$6,665,000	\$942,651	\$67,403	\$8,864,256

According to the City, the costs for the land (\$2,325,000) and the engineering costs (\$529,020) are not included as a reimbursable amount due to the fact that the engineering costs were necessary to cure an existing deficiency more than for future growth and the land purchase serves the buildout demand and is being assessed through user rates.

The City utilized several resources to fund the SSA treatment plant expansion, including: City funds, grant monies, a State loan, impact fees, and wastewater utility revenues. The total principal amount of the bonds was \$6,665,000, with an interest cost of \$899,820. Based on the level of service per ERC of 244 gallons per day, the 1.2 MG treatment facility should serve 4,926 ERCs. Approximately 25% of the plant expansion cured the systems existing deficiency, and will not be included in the impact fees. The remaining 75% will handle sewer flows caused by new growth in the SSA and will be included in the SSA sewer impact fees. Thus, a total of \$7,323,057 is allocated as a buy-in component, as shown in Table 4.4.

TABLE 4.4: ESTIMATED COST TO NEW GROWTH - TREATMENT

	Reimbursable Amount	ERCs Served	Impact Fee Related	Cost to Impact Fee	COST TO IMPACT FEE	BUY-IN FEE PER ERC
Treatment Facility	\$8,864,256	4,926	75%	\$6,648,192	\$6,648,192	\$1,799
Debt Related Cost (Interest)	\$899,820	4,926	75%	\$674,865	\$674,865	\$183
Total	\$9,764,076	4,926		\$7,323,057	\$7,323,057	\$1,982

*The estimate of ERCs served by the existing treatment plant is based on the total processing capacity of 1.2 MGD which should serve 4,926 ERCs (based on the level of service of 244 gallons per day/ERC).



SECTION 5: CAPITAL FACILITY ANALYSIS

The IFFP has identified the growth related projects needed within the next six years.⁶ Capital projects related to curing existing deficiencies were not included in the calculation of the impact fees. Total future projects applicable to new development are shown below.

FUTURE CITY WASTEWATER CAPITAL PROJECTS

Table 5.1 illustrates the estimated cost of future capital improvements generally for each service area. These costs are described by component below. See Appendix B for more details.

TABLE 5.1: SUMMARY OF FUTURE WASTEWATER CAPITAL FACILITIES

SEWER PROJECTS	2015 COST	TOTAL CONST. YEAR COST	TOTAL CITY FUNDED	COST TO GROWTH	GENERAL FUND
Capital Project Needs: 0-6 Year Horizon					
NSA	\$2,220,000	\$2,538,548	\$2,538,548	\$2,318,548	\$220,000
SSA	\$4,860,000	\$5,193,486	\$5,193,486	\$4,955,986	-
Capital Project Needs: 6+ Year Horizon					
NSA	\$1,930,000	\$2,304,521	\$2,304,521	\$2,304,521	-
SSA	\$156,540,000	\$186,916,946	\$186,916,946	\$186,916,946	-

TABLE 5.2: FUTURE CAPITAL FACILITIES BY TYPE

	TOTAL CITY FUNDED		TOTAL	IMPACT FEE ELIGIBLE		TOTAL
	Collection	Treatment	Total	Collection	Treatment	Total
Capital Project Needs: 0-6 Year Horizon						
NSA	\$2,538,548	-	\$2,538,548	\$2,318,548	-	\$2,318,548
SSA	\$4,243,486	\$950,000	\$5,193,486	\$4,243,486	\$712,500	\$4,955,986
Capital Project Needs: 6+ Year Horizon						
NSA	\$2,304,521	-	\$2,304,521	\$2,304,521	-	\$2,304,521
SSA	\$34,770,803	\$152,146,144	\$186,916,946	\$34,770,803	\$152,146,144	\$186,916,946
Grand Total	\$43,857,358	\$153,096,144	\$196,953,501	\$43,637,358	\$152,858,644	\$196,496,001

SSA Treatment: As stated above, the treatment facility expansion has excess capacity to handle 3,695 new ERCs. The projected growth in ERCs in the SSA is expected to increase by 1,175 ERCs in the next six years. This illustrates that there is excess capacity within the treatment facility to serve additional new growth. The IFFP has also identified the need for Project 5 – Solids Handling Expansion which will replace the existing solids handling facility with a new building and larger equipment to increase capacity for future development.

SSA Collection: No existing deficiencies are identified in the SSA related to collection. A total of \$4,243,486 has been identified as future collection capital projects for the SSA within the next six years.

NSA Treatment: Wastewater in the NSA flows to and is treated by the Timpanogos Special Service District. The City does not assess an impact fee to the NSA for treatment.

NSA Collection: A total of \$2,538,548 has been identified as future capital projects within the next six years to serve new growth in the NSA, of which \$2,318,548 is impact fee eligible.

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed to provide services to service areas within the community at large.⁷ Project improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.⁸ To the extent possible, this analysis only includes the costs of system improvements related to new growth within the proportionate share analysis.

⁶ IFFP pp.19-20, p.24

⁷ 11-36a-102(21)

⁸ 11-36a-102(14)

FUNDING OF FUTURE FACILITIES

The IFFP must also include a consideration of all revenue sources, including impact fees and the dedication of system improvements, which may be used to finance system improvements.⁹ In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.¹⁰

In considering the funding of future facilities, the City has determined the portion of future projects that will be funded by impact fees as growth-related, system improvements. Revenues from other government agencies are not currently contemplated in this analysis. If these revenues become available in the future, the impact fee analysis should be revised.

Utility Rate Revenues: Utility rate revenues serve as the primary funding mechanism within enterprise funds. Rates are established to ensure appropriate coverage of all operations and maintenance expenses, debt service coverage, and capital project needs. Impact fee revenues are generally considered non-operating revenues and help offset future capital costs.

Future Capital Financing Costs: The capital projects that will be constructed to cure the existing system deficiencies will be funded through user rate revenues. All other capital projects within the next six years which are intended to serve new growth will be funded through sanitary sewer impact fees or on a pay-as-you-go approach. Thus, costs associated with future debt are not included in the Impact Fee Analysis.

While not currently contemplated as funding sources in this analysis, other revenues such as property taxes, grants, or loans can be used to fund these types of expenditures, as described below.

- **Property Tax Revenues:** Property tax revenues are not specifically identified in this analysis as a funding source for growth-related capital projects, but inter-fund loans can be made from the general fund which would ultimately include some property tax revenues. Inter-fund loans would be repaid once sufficient impact fee revenues have been collected.
- **Grants, Donations and Other Contributions:** Grants and donations are not expected as a future funding source. The impact fees should be adjusted if grant monies are received. New development may be entitled to a reimbursement for any grants or donations received by the City for growth related projects, or for developer funded IFFP projects. It is anticipated that future project improvements will be funded by the developer. These costs have been excluded from the calculation of the impact fee.

PROPOSED CREDITS OWED TO DEVELOPMENT

The Impact Fees Act requires a local political subdivision or private entity to ensure that the impact fee enactment allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer: (a) dedicates land for a system improvement; (b) builds and dedicates some or all of a system improvement; or (c) dedicates a public facility that the local political subdivision or private entity and the developer agree will reduce the need for a system improvement.¹¹

The facilities must be considered system improvements or be dedicated to the public, and offset the need for an improvement identified in the IFFP.

EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of capital infrastructure that relate to future growth. The impact fee calculations are structured for impact fees to fund 100 percent of the growth-related facilities identified in the proportionate share analysis as presented in the impact fee analysis. Even so, there may be years that impact fee revenues cannot cover the annual growth-related expenses. In those years, other revenues such as general fund revenues will be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through impact fees.

NECESSITY OF IMPACT FEES

An entity may only impose impact fees on development activity if the entity's plan for financing system improvements establishes that impact fees are necessary to achieve parity between existing and new development. This analysis has identified the improvements to public facilities and the funding mechanisms to complete the suggested improvements. Impact fees are identified as a necessary funding mechanism to help offset the costs of new capital improvements related to new growth. In addition, alternative funding mechanisms are identified to help offset the cost of future capital improvements.

⁹ 11-36a-302(2)

¹⁰ 11-36a-302(3)

¹¹ 11-36a-402(2)



SECTION 6: SANITARY SEWER IMPACT FEE CALCULATION

The City is the primary sewer collection provider to all of Eagle Mountain City, excluding the West Service Area. The City owns the existing treatment facility that serves the SSA. Sewer treatment is provided to the NSA through Timpanogos Special Service District ("TSSD"). The culinary water impact fees proposed in this analysis will be assessed to the NSA and SSA. The impact fee calculations include the costs of constructing future water projects and the related improvements (including an annual inflation rate for projects constructed after 2015). The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the estimated ERC demand served by the proposed projects.

PROPOSED SANITARY SEWER IMPACT FEES

The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the new growth served by the proposed projects. The impact fee per ERC is calculated below for each proposed service area.

TABLE 6.1: PROPORTIONATE SHARE ANALYSIS

NSA	EST. ACTUAL COST	IF ELIGIBLE	IFA COSTS	ERCs SERVED	FEE PER ERC
Collection IFFP Cost	\$2,318,548	100%	\$2,318,548	4,393	\$528
Treatment IFFP Cost*	NA	NA	NA	NA	NA
Impact Fee Fund Balance	(\$381,291)	100%	(\$381,291)	4,393	(\$87)
Professional Expense	\$3,950	100%	\$3,950	1,064	\$4
Total	\$1,941,208		\$1,941,208		\$445

*Treatment provided by Timpanogos Special Service District

SSA	Est. Actual Cost	IF Eligible	IFA Costs	ERCs Served	Fee Per ERC
Collection IFFP Cost	\$4,243,486	100%	\$4,243,486	3,301	\$1,286
Treatment Buy-In*	\$9,764,076	75%	\$7,323,057	3,695	\$1,982
Treatment IFFP Cost	\$712,500	100%	\$712,500	3,695	\$193
Impact Fee Fund Balance	(\$381,291)	100%	(\$381,291)	3,301	(\$116)
Professional Expense	\$3,950	100%	\$3,950	1,175	\$3
Total	\$14,342,721		\$11,901,702		\$3,348

*The estimate of ERCs served by the existing treatment plant is based on the total processing capacity of 1.2 MGD which should serve 4,926 ERCs (based on 244 gallons per day/ERC). Since the facility has 75 percent available capacity, the value of the excess capacity will serve 3,695 ERCs (75 percent of the total).

COMBINED SEWER IMPACT FEE SUMMARY

The combined impact fee, including the buy-in component, is illustrated in Table 6.2.

TABLE 6.2: COMBINED SEWER IMPACT FEE SUMMARY

	BUY-IN					Future Facilities	Treatment	Total Per ERC
	98-1	PLANT PROPERTY BUY-IN	EVANS RANCH EXTENSION	RANCHES PKWY EXTENSION	CAMP WILLIAMS LINE			
North Service Area	\$433.61	-	\$333.73	\$1.33	\$28.65	\$444.72	\$2,475.00*	\$3,717.04
South Service Area	-	\$113.68	-	-	-	\$1,366.22	\$1,982.11	\$3,462.01

*Treatment Fee in NSA assessed by Timpanogos Special Improvement District and is subject to change by TSSD.

NON-STANDARD SANITARY SEWER IMPACT FEES

The City reserves the right under the Impact Fees Act¹² to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City's culinary water system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category.

MULTI-FAMILY EQUIVALENCY CONVERSION

According to the City, an adjustment factor of .8 will be applied to the estimated fee per ERC for multi-family units. Multi-family units are housing units with three or more attached units.

CONSIDERATION OF ALL REVENUE SOURCES

The Impact Fees Act requires the proportionate share analysis to demonstrate that impact fees paid by new development are the most equitable method of funding growth-related infrastructure. See Section 5 for further discussion regarding the consideration of revenue sources.

¹² I 1-36a-402(1)(c)

EXPENDITURE OF IMPACT FEES

Legislation requires that impact fees should be spent or encumbered within six years after each impact fee is paid. Impact fees collected in the IFFP planning horizon should be spent only on those projects outlined in the IFFP as growth related costs to maintain the LOS.

GROWTH-DRIVEN EXTRAORDINARY COSTS

The City does not anticipate any extraordinary costs necessary to provide services to future development.

SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. A three percent annual construction inflation adjustment is applied to the proposed capital improvements identified in this analysis. The impact fee analysis should be updated regularly to account for changes in costs estimates over time.

NOTICE
DRAFT



APPENDIX A: DESCRIPTION OF SIDS

SID 98-1

The City, at the request of The Ranches, L.C. and Meadow Ranch, L.C. previously created "Eagle Mountain, Utah, Special Improvement District 98-1 ("SID 98-1") pursuant to Resolution 15-98 adopted on August 11, 1998, as amended by Resolution 03-99 adopted on May 4, 1999 and a resolution adopted on April 15, 2003, and pursuant to the Act, as amended. SID 98-1 is located in Area Three of the City and was created to assist in financing the acquisition and construction of certain improvements. After the creation of SID 98-1, the City issued its \$12,105,000 Special Assessment Bonds, the proceeds of which were used to finance a portion of those improvements. The Series 1999 Bonds were issued pursuant to Resolution No. 04-99 adopted on May 4, 1999 (the "1999 Bond Resolution").

SID 98-1 consists of two separate areas that comprise a total of approximately 1,810 acres of partially developed land. Assessments were originally levied on approximately 1,552 acres of property within SID 98-1 on an area method of assessment at the rates per developable acre. At the time the Series 1999 Bonds were issued, SID 98-1 contained approximately 1,089 developable acres. Pursuant to the Amended Assessment Ordinance, the City will levy assessments on 647 developable acres of property within SID 98-1 (the "98-1 Assessed Property") to secure the payment of debt service on the Series 2004A Bonds. The 98-1 Assessed Property will be assessed on an area method of assessment at the rates per developable acre.

IMPROVEMENTS

A portion of the proceeds of the Series 1999 Bonds were originally used to finance the costs of improvements consisting of constructing and paving roads, installing a major sewer trunk line, constructing a public water system well and distribution system improvements, sewer collection improvements, telecommunication conduit, cabling and other facilities, electrical and natural gas utility distribution system facilities and completing landscaping and park improvements; replacing 12kV above ground electrical transmission lines with underground electrical transmission lines; and certain other improvements. The construction and installation of such improvements have been completed.

DISTRICT 2000-1

The City, at the request of The Ranches, L.C. and Meadow Ranch, L.C., previously created Eagle Mountain, Utah Special Improvement District No. 2000-1 ("SID 2000-1"). SID 2000-1, which was divided into two assessment zones, consists of approximately 2,495 acres of partially developed land and is located entirely within Area Three of the City. SID 2000-1 was created to finance the acquisition, construction and installation of certain improvements for the benefit of the property owners within SID 2000-1. The City issued its \$11,935,000 Special Assessment Bonds, Series 2001 (SID 2000-1), the proceeds of which were used to finance a portion of these improvements. Approximately 1,804 acres of property within SID 2000-1 (the "2000-1 Assessed Property") was originally assessed to secure the payment of debt service on the Series 2001 Bonds.

Approximately 561 acres of the 98-1 Assessed Property also constitutes 2000-1 Assessed Property. The owners of such property (the "9812000 Assessed Property") are therefore subject to the assessments levied in SID 98-1 and in SID 2000-1. The amount of assessments levied on the 9812000 Assessed Property may adversely affect the development of such property and SID 98-1.



APPENDIX B: SEWER FUTURE CAPITAL IMPROVEMENTS

	COMPONENT	SEWER PROJECTS	CONSTRUCTION YEAR	2015 ESTIMATED COST	CONSTRUCTION INFLATION*	TOTAL CONSTRUCTION YEAR COST	FUNDING SOURCE	% CITY FUNDED	TOTAL CITY FUNDED	% TO GROWTH	QUALIFIED IMPACT FEE EXPENSE	GENERAL FUND	REMAINING TO BE FUNDED
Capital Project Needs: 0-6 Year Horizon													
NSA	Collection	A – Ranches Parkway Trunkline Upsize	2015	\$220,000	\$0	\$220,000	City	100%	\$220,000	0%	\$0	\$220,000	-
NSA	Collection	1 – Ranches Parkway Trunkline Upsize	2020	\$2,000,000	\$318,548	\$2,318,548	Impact Fees	100%	\$2,318,548	100%	\$2,318,548	-	-
NSA Subtotal				\$2,220,000	\$318,548	\$2,538,548		100%	\$2,538,548	91%	\$2,318,548	\$220,000	\$0
SSA	Treatment	5 – Solids Handling Expansion	2015	950,000	-	950,000	Impact Fees	100%	\$950,000	75%	\$950,000	-	\$237,500
SSA	Collection	6 – Sweetwater Road Trunkline (North)	2016	220,000	6,600	226,600	Impact Fees	100%	\$226,600	100%	\$226,600	-	-
SSA	Collection	8 – Sweetwater Road Trunkline (North)	2017	480,000	29,232	509,232	Impact Fees	100%	\$509,232	100%	\$509,232	-	-
SSA	Collection	9 – Sweetwater Road (South to Plant)	2018	3,210,000	297,654	3,507,654	Impact Fees	100%	\$3,507,654	100%	\$3,507,654	-	-
SSA Subtotal				\$4,860,000	\$333,486	\$5,193,486		100%	\$5,193,486	100%	\$5,193,486	\$0	\$237,500
WSA	Collection	4 – Trunkline 3	2015	\$5,580,000	-	5,580,000	Impact Fees	100%	\$5,580,000	100%	\$5,580,000	-	-
WSA Subtotal				\$5,580,000	\$0	\$5,580,000		100%	\$5,580,000	100%	\$5,580,000	\$0	\$0
Capital Project Needs: 6+ Year Horizon													
NSA	Collection	2 – Pony Express Phase 1		80,000	15,524	95,524	Impact Fees	100%	\$95,524	100%	\$95,524	-	-
NSA	Collection	3 – Pony Express Phase 2		1,460,000	283,316	1,743,316	Impact Fees	100%	\$1,743,316	100%	\$1,743,316	-	-
NSA	Collection	4 – Eastside Trunkline (Upsize Cost Only)		390,000	75,680	465,680	Impact Fees	100%	\$465,680	100%	\$465,680	-	-
NSA Subtotal				\$1,930,000	\$374,521	\$2,304,521		100%	\$2,304,521		\$2,304,521	\$0	\$0
SSA	Collection	7 – Eagle Mountain Blvd Trunkline		400,000	77,621	477,621	Impact Fees	100%	\$477,621	100%	\$477,621	-	-
SSA	Collection	10 – New Lift Station and Force Main		640,000	124,193	764,193	Impact Fees	100%	\$764,193	100%	\$764,193	-	-
SSA	Treatment	11 – 2.4 MGD Plant Expansion		7,720,000	1,498,084	9,218,084	Impact Fees	100%	\$9,218,084	100%	\$9,218,084	-	-
SSA	Collection	11 – New 10-inch (upsized cost)		3,430,000	665,599	4,095,599	Impact Fees	100%	\$4,095,599	100%	\$4,095,599	-	-
SSA	Collection	11 – New 12-inch (upsized cost)		3,230,000	626,789	3,856,789	Impact Fees	100%	\$3,856,789	100%	\$3,856,789	-	-
SSA	Collection	11 – New 15-inch (upsized cost)		6,690,000	1,298,210	7,988,210	Impact Fees	100%	\$7,988,210	100%	\$7,988,210	-	-
SSA	Collection	11 – New 18-inch (upsized cost)		4,760,000	923,689	5,683,689	Impact Fees	100%	\$5,683,689	100%	\$5,683,689	-	-
SSA	Collection	11 – New 24-inch (upsized cost)		7,540,000	1,463,154	9,003,154	Impact Fees	100%	\$9,003,154	100%	\$9,003,154	-	-
SSA	Collection	11 – New 30-inch (upsized cost)		250,000	48,513	298,513	Impact Fees	100%	\$298,513	100%	\$298,513	-	-
SSA	Collection	11 – New 36-inch (upsized cost)		1,500,000	291,078	1,791,078	Impact Fees	100%	\$1,791,078	100%	\$1,791,078	-	-
SSA	Collection	11 – New 60-inch (upsized cost)		680,000	131,956	811,956	Impact Fees	100%	\$811,956	100%	\$811,956	-	-
SSA	Treatment	11 – 5 MGD Plant Expansion		27,030,000	5,245,234	32,275,234	Impact Fees	100%	\$32,275,234	100%	\$32,275,234	-	-
SSA	Treatment	11 – 10 MGD Plant Expansion		30,890,000	5,994,275	36,884,275	Impact Fees	100%	\$36,884,275	100%	\$36,884,275	-	-
SSA	Treatment	11 – 15 MGD Plant Expansion		30,890,000	5,994,275	36,884,275	Impact Fees	100%	\$36,884,275	100%	\$36,884,275	-	-
SSA	Treatment	11 – 20 MGD Plant Expansion		30,890,000	5,994,275	36,884,275	Impact Fees	100%	\$36,884,275	100%	\$36,884,275	-	-
SSA Subtotal				\$156,540,000	\$30,376,946	\$186,916,946		100%	\$186,916,946		\$186,916,946	\$0	\$0
WSA	Collection	1 – Trunkline 1		2,150,000	417,212	2,567,212	Impact Fees	100%	\$2,567,212	100%	\$2,567,212	-	-
WSA	Collection	2 – Connect Old System to New System		40,000	7,762	47,762	Impact Fees	100%	\$47,762	100%	\$47,762	-	-
WSA	Collection	3 – Trunkline 2		180,000	34,929	214,929	Impact Fees	100%	\$214,929	100%	\$214,929	-	-
WSA	Collection	5 – 8" Collection Line 1		180,000	34,929	214,929	Impact Fees	100%	\$214,929	100%	\$214,929	-	-
WSA	Collection	6 – 8" Collection Line 2		80,000	15,524	95,524	Impact Fees	100%	\$95,524	100%	\$95,524	-	-
WSA	Collection	7 – 8" Collection Line 3		90,000	17,465	107,465	Impact Fees	100%	\$107,465	100%	\$107,465	-	-
WSA	Collection	8 – 8" Collection Line 4		60,000	11,643	71,643	Impact Fees	100%	\$71,643	100%	\$71,643	-	-
WSA	Collection	9 – 8" Collection Line 5		190,000	36,870	226,870	Impact Fees	100%	\$226,870	100%	\$226,870	-	-
WSA	Collection	10 – 8" Collection Line 6		130,000	25,227	155,227	Impact Fees	100%	\$155,227	100%	\$155,227	-	-
WSA	Collection	11 – Trunkline 4		420,000	81,502	501,502	Impact Fees	100%	\$501,502	100%	\$501,502	-	-
WSA Subtotal				\$3,520,000	\$683,064	\$4,203,064		100%	\$4,203,064		\$4,203,064	\$0	\$0
NSA & SSA Only				\$165,550,000	\$31,403,501	\$196,953,501			\$196,953,501		\$196,733,501	\$220,000	\$237,500

*Construction inflation projected at 3% annually, Projects within the 6+ Year Horizon are based on a construction year of 2021 for the purposes of calculating inflation.