Lehi City

Culinary Water Impact Fee Analysis

ZIONS PUBLIC FINANCE, INC.

April 2018

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EXECUTIVE SUMMARY

Lehi City, Utah (the City) recently commissioned Zions Public Finance, Inc. (Zions) to calculate the City's culinary water impact fees in accordance with Utah State Law. An impact fee is a payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. In conjunction with this project, Bowen Collins & Associates (BC&A) prepared the *Impact Fee Facilities Plan for Culinary Water* (IFFP).

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. As impact fees may only be used to perpetuate the current level of service, the City will be required to use other revenue sources 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.

LEHI CITY WATER SYSTEM OVERVIEW

City-wide Service Area

The culinary water impact fee will be assessed to a single, City-wide service area. The City also has a pressurized irrigation system that serves the entire City's outdoor water needs.

There are currently no outstanding bonds related to the culinary water system although there are two outstanding notes that are not impact fee qualifying. The City has determined that a new $8M water revenue bond will be issued in 2018. Proceeds will be applied 50% to culinary water and 50% to pressurized irrigation. The qualifying interest portion of the bond that relates to culinary water has been included in the impact fees. The calculation is shown in Figure 3.4 of this analysis.

Many projects identified in the IFFP will be used to cure existing deficiencies that will benefit existing users. The portion of a project's cost that cures a deficiency cannot be funded with impact fees and will be paid for with water user fees.

Level of Service – Equivalent Residential Unit

Level of service (LOS) defines the demands that a typical residential user will place on the culinary water system. LOS is defined in terms of an Equivalent Residential Unit (ERU) which represents the average demand of a single-family residence in Lehi. The demands of non-residential properties can be expressed as multiples of an ERU based on equivalent meter sizes as shown in Figure ES.2.

Impact fee law prohibits the use of impact fees to increase the LOS above the current demands. At times, a water system may need to increase a level of service to cure an existing deficiency but projects fixing deficiencies must be paid for by non-impact fee revenues and a credit must be provided to the impact fee payer. It is assumed that the proposed LOS is equal to the historic observed demands.

In this document, the LOS per ERU is equated to an average day demand of 254.8 gallons per day (GPD) or an average annual demand of 93,002 gallons (254.8 multiplied by 365 days). Peak day demands have been

observed to have a peaking factor of 1.59 (405.7 gpd/254.8 gpd)[1]. This means that on the peak annual day usage an ERU's demand can climb to 405.7 gpd.

In 2016 the City served 17,849 ERUs which is anticipated to grow to approximately 23,523 ERUs by 2026. The culinary water impact fees are calculated by dividing the cost of existing and future projects by the ten-year demand increase of 5,674 ERUs. The City is expected to grow to 51,269 ERUs by buildout.

CITY-WIDE SERVICE AREA CULINARY WATER IMPACT FEE CALCULATION

The bottom line of Figure ES.1 shows a total of approximately $46.3M existing assets and future water costs that are impact fee eligible; however, only $7M of these assets will meet the ten-year demand. This cost is divided by 5,674 ERUs that will add to the City-wide service area over the next ten years and results in an impact fee of $1,194.07 per ERU.

FIGURE ES.1: IMPACT FEE PER CULINARY WATER ERU

Component	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (ERU)	Cost per ERU
CULINARY PRODUCTION/ TREATMENT					
Future 10 Year Capital Projects	$ 2,369,000	42.20%	$ 999,718	5,674	$ 176
Future Production Related Debt to be Issued - INTEREST ONLY	-	0.00%	-	5,674	-
Existing Production - Sandpit	2,457,898	0.39%	9,643	5,674	2
Existing Production- CWP Gardner and Holbrook	1,533,600	35.29%	541,156	5,674	95
Existing Production Related Debt - INTEREST ONLY	-	0.00%	-	5,674	-
Production/Treatment Subtotal	**$ 6,360,498**		**$ 1,550,516**		**$ 273.27**
CULINARY STORAGE					
Future 10 Year Capital Projects	$ 10,422,000	26.86%	$ 2,799,702	5,674	$ 493
Future Storage Related Debt to be Issued - INTEREST ONLY	1,744,278	29.55%	515,472	5,674	91
Existing Storage Projects	5,450,118	5.54%	301,831	5,674	53
Existing Storage Related Debt - OUTSTANDING INTEREST	-	0.00%	-	5,674	-
Storage Subtotal	**$ 17,616,396**		**$ 3,617,005**		**$ 637.47**
CULINARY TRANSMISSION/PUMPING					
Future 10 Year Capital Projects	$ 8,551,000	12.12%	$ 1,036,199	5,674	$ 183
Future Transmission Related Debt to be Issued - INTEREST ONLY	-	0.00%	-	5,674	-
Existing Transmission Projects	13,704,670	6.10%	835,985	5,674	147
Existing Transmission Related Debt - OUTSTANDING INTEREST	-	0.00%	-	5,674	-
Transmission/Pumping Subtotal	**$ 22,255,670**		**$ 1,872,184**		**$ 329.96**
Professional Services/ Credits					
Unspent Impact Fee Funds (Excluding Uncommitted Funds)	-	0.00%	$ -	5,674	$ -
Credit for Projects Benefitting Existing Users*				5,674	(57.20)
Professional Services Expense	60,000	100%	60,000	5,674	11
Professional Services/Credits Subtotal	**60,000**		**60,000**		**(46.62)**
Total Impact Fee Per ERU	**$ 46,292,564**		**$ 7,099,705**		**$ 1,194.07**

***See Appendix H for credit calculation**

[1] Bowen Collins IFFP

PROPOSED CULINARY WATER IMPACT FEE METER MULTIPLIERS

Figure ES.2 shows the impact fee according to meter size. Using meter multipliers is a very common and simple method of assessing impact fees. The size of meter chosen for a connection determines the maximum flow that can pass through the meter and therefore the potential impact that the connection can place on the system. The multipliers shown in Figure ES.2 are based upon the equivalent flows of meters installed by Lehi City.

FIGURE ES.2: MAXIMUM LEGAL CULINARY WATER IMPACT FEE

Unit Type	Fee per ERU	Meter Size	Equivalency Ratio	Impact Fee by Meter Size
Residential	$ 1,194.07	per dwelling unit	1.00	**$ 1,194.07**
Non-Residential/ Multi-Family Residential		3/4"	1.00	**1,194.07**
		1"	2.67	**3,184.19**
		1 1/2"	3.33	**3,980.23**
		2"	10.67	**12,736.75**
		3"	23.33	**27,861.64**
		4"	42.00	**50,150.95**
		6"	93.33	**111,446.56**
		8"	160.00	**191,051.25**

The City reserves the right under the Impact Fees Act (Utah Code 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 must 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 upon the City's infrastructure. The impact fee formula shown below in Figure ES.3 for a non-standard user is based upon the user's anticipated annual water demand.

FIGURE ES.3: CALCULATION OF CITY-WIDE NON-STANDARD IMPACT FEE

Non-Standard Users Impact Fee Formula
Step 1: Identify Estimated Average Annual Demand (Gallons) of Proposed
Step 2: Multiply Average Annual Demand by Impact Fee per Gallon of $0.013

CHAPTER 1: OVERVIEW OF THE CULINARY WATER IMPACT FEES

PURPOSE OF AN IMPACT FEE

An impact fee is a payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of new development on public infrastructure. An impact fee recovers the City's capital costs of excess culinary water capacity reserved for new growth and the costs of future projects that add new capacity for growth. The impact fee is charged directly to new development as a condition of receiving a building permit. Impact fees prevent existing users from paying growth-related costs through user rates. Impact fees also provide a mechanism for developers to construct system improvements at their own cost, but receive repayment through impact fees from other developers benefitting from the improvements through reimbursement agreements with the City.

The Utah Impact Fees Act allows only certain costs to be included in an impact fee to fairly charge the true cost of system expansion to developers. Eligible costs include future and historic projects that 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 were built by developers to serve a specific development cannot be included in the impact fee. System improvements that cure a deficiency or enhance the LOS may not be included either.

This impact fee analysis provides documentation that there is a fair comparison, or rational nexus, between the impact fee charged to new development and the impact that growth has on the system. Impact fees are charged to different types of residential and non-residential development and in this document, are scaled according to meter size as an estimate of the impact on the culinary water system.

COSTS TO BE INCLUDED IN THE IMPACT FEE

Impact fees are generally calculated based upon the following costs:

- New culinary water capital infrastructure for production/treatment, storage, and transmission/pumping that will serve new development;
- Professional and planning expenses related to the construction of system improvements that will serve new development;
- Historic costs of existing improvements that have excess capacity that can serve new development.

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

- Projects that cure system deficiencies for existing users;
- Any project portions 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; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

ASSESSMENT OF AN IMPACT FEE

The City will assess the impact fee as part of the building permit process. New connections will pay the impact fee before a final building permit is issued. The impact fee will be determined by meter size or according to a non-standard water impact fee calculation if certain water demand data is provided according to City policy. Remodels and expansions of existing facilities will also need to pay an impact fee if the culinary water meter size is increased, but will only pay the difference in the fee for the new meter size minus the fee for the existing meter size. For example, if a building currently has a ¾" meter but requires a 1" meter following an expansion, only the difference between the impact fee for a 1" meter and a 3/4" meter will be paid. The same approach applies to redevelopment projects.

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

The City will assess the impact fee to a single, City-wide service area. The facilities that pertain to the service area are the major transmission/pumping, production/treatment, and storage facilities that produce and circulate water throughout the entire City. A map of the City-wide service area is included in Appendix A of this report.

PROPOSED LEHI CULINARY DEMANDS

Lehi's culinary water system currently serves 17,849 Equivalent Residential Units (ERUs) which will grow to an estimated 23,523 ERUs by 2026. This impact fee analysis is based on a 10-year growth window. Figure 2.1 shows culinary water growth projections in the Lehi service area. The estimated growth in culinary water demand for the next ten years is scheduled to be 5,674 ERUs.

FIGURE 2.1: PROJECTED GROWTH IN CULINARY WATER DEMAND

Year	Single Family Units	Multifamily Units	Non-Residential Area (ksf)	Total City-Wide ERUs	Peak Day Demand (Mgd)	Peak Day Production Requirement (mgd)	Annual Demand (ac ft)
2016	13,230	3,536	12,486	17,849	7.24	9.62	5,094
2017	13,651	3,649	12,883	18,417	7.47	9.94	5,256
2018	14,071	3,761	13,280	18,984	7.70	10.26	5,216
2019	14,492	3,874	13,677	19,552	7.93	10.58	5,226
2020	14,912	3,986	14,074	20,119	8.16	10.90	5,742
2021	15,333	4,098	14,471	20,686	8.39	11.20	5,904
2022	15,753	4,211	14,868	21,254	8.62	11.50	6,066
2023	16,174	4,323	15,265	21,821	8.85	11.80	6,228
2024	16,595	4,435	15,661	22,388	9.08	12.10	6,390
2025	17,015	4,548	16,058	22,956	9.31	12.40	6,552
2026	17,436	4,660	16,455	23,523	9.54	12.70	6,714
2030	19,108	5,107	18,033	25,779	10.40	13.90	7,358
2040	23,288	6,224	21,978	31,419	12.70	17.00	8,967
2050	27,469	7,342	25,924	37,059	15.00	20.00	10,577
2060	31,649	8,459	29,869	42,699	17.30	23.00	12,187
Buildout	32,902	8,922	78,318	51,269	20.90	27.90	14,770

Figure 2.2 summarizes the baseline measured demand (year 2016) and ten-year demand (year 2026). 5,674 ERUs are expected to be added in the ten-year impact fee horizon.

FIGURE 2.2: GROWTH IN ERUS THROUGH 2026

Ten-Year Culinary Water Demand (ERU)	
2016 Demand (ERU)	17,849
2026 Demand (ERU)	23,523
Differential	5,674
% Undeveloped	24%
ERUs Added in Ten Years	**5,674**

Source: IFFP for Culinary Water Prepared by BC&A

EXISTING AND PROPOSED LEVEL OF SERVICE ANALYSIS

An impact fee per ERU must balance the capacity of the facilities and the number of ERUs that will be added in ten years. The culinary water IFFP prepared by BC&A has identified the existing and future water projects and calculated the percentage of each project's capacity that will be used to meet the ten-year growth. The number of new ERUs that a project can still serve is determined by dividing the LOS per ERU by the amount of unused capacity in the project.

Level of service defines how much of the culinary water system a typical residential user, defined as an Equivalent Residential Unit, will require and should pay for with an impact fee. LOS is based upon historic observed water demands per ERU. Impact fee law prohibits the use of impact fees to increase the LOS above the current demands. At times, a water system may need to increase a level of service to cure an existing deficiency but projects fixing deficiencies must be paid for with non-impact fee revenues and a credit must be provided to the impact fee payer. It is assumed that LOS is not increased in this document above historic observed demands.

LOS is calculated in terms of average day demand and peak day demand. In this document, the LOS per ERU is equated to an average day demand of 254.8 gallons per day (GPD). Peak day demands have been observed to have a peaking factor of 1.59 (405.7 gpd/254.8 gpd)[2]. This means that on the peak annual day usage an ERU's demand can climb to 405.7 gpd. A single family residential home is equated to one ERU but non-residential properties can be converted to a number of equivalent ERUs using meter multipliers described in Chapter 5 of this report.

The detailed LOS standards that allow the system to provide 254.8 GPD per ERU are shown in Figure 2.3.

FIGURE 2.3: LEVEL OF SERVICE SUMMARY

	Performance Standard	Current Level of Service	Proposed Level of Service
Production Capacity			
Production Capacity (gdp/ERU)	540	838	540
Pumping Capacity			
Pumping Capacity (gdp/ERU)	406	585	406
Storage			
Storage (gallons/ERU)	400	500	400
Transmission and Distribution			
Peak Day Demand Pressure (psi)	40	35	40
Peak Hour Demand Pressure (psi)	30	29	30
Minimum Available Fire Flow at 50 psi during Peak Day Demand (gpm)	550	146	550

	Level of Service
Average Day Demand (gpd/ERU)	254.80
Peak Day Demand (gpd/ERU)	405.70
Peak Hour Demand (gpd/ERU)	811.40

Source: Water Impact Fee Facilities Plan Table 1 Prepared By Bowen Collins & Associates

[2] Bowen Collins IFFP

CHAPTER 3: HISTORIC AND FUTURE CULINARY WATER CAPITAL PROJECTS

HISTORIC CAPITAL PROJECT COSTS BY WATER COMPONENTS

The City is entitled to recover a portion of existing water costs assuming that the assets are: system improvements, funded by the City or a developer in-lieu of impact fees, are currently in service, have a life of more than 10 years, and do not constitute repair and replacement.

Appendix E includes a list of capital assets reviewed by the City Water Department to determine which projects are impact fee qualifying. The costs used are strictly historic costs taken from the City's depreciation statements and construction records to determine the actual costs incurred by the City.

Figure 3.1 shows the division of historic capital project costs between qualifying assets such as existing wells, storage reservoirs, treatment facilities, and transmission lines. These costs include only capital assets, they do not include standard O&M expenses. The total water historic cost is approximately $47.2M. Non-qualifying assets include items such as repair and replacement (R&R), storm improvements included in the water fund, items costing less than $5,000, fund reimbursements, and developer contributions also known as project improvements.

Figures 3.1 shows the detailed categories in the depreciation statement and the asset value that pertains to each category by component. After a careful review of water assets, City staff determined that only $21.6M are impact fee qualifying water system improvements. Figure 3.2 sorts the costs as qualifying or non-qualifying. The resulting qualifying cost of existing assets is used in calculating the impact fee in Figure 4.1.

FIGURE 3.1: EXISTING CULINARY WATER ASSETS SUMMARY

CULINARY WATER EXISTING ASSETS										
	Equipment	**Planning**	**Pumping**	**Source**	**Storage**	**Storm**	**Supply**	**Transmission**	**Unknown**	**Grand Total**
Buildings/ Structures	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 751,511	$ 751,511
Improvements	136,110	-	343,788	3,490,135	5,545,195	26,260	-	14,287,537	1,377,182	25,206,207
Land	-	-	-	378,386	-	-	-	620,381	-	998,767
Water Rights	-	-	-	-	-	-	1,179,644	-	-	1,179,644
Wells,Pumps	-	-	-	2,836,850	-	-	-	-	-	2,836,850
Contributed	-	-	-	-	-	-	-	15,829,298	-	15,829,298
Planning	-	427,271	-	-	-	-	-	-	-	427,271
Grand Total	**$ 136,110**	**$427,271**	**$343,788**	**$6,705,370**	**$5,545,195**	**$26,260**	**$1,179,644**	**$30,737,216**	**$2,128,693**	**$ 47,229,547**

FIGURE 3.2: QUALIFYING CULINARY WATER ASSETS SUMMARY

IMPACT FEE QUALIFYING ASSETS										
	Equipment	**Planning**	**Pumping**	**Source**	**Storage**	**Storm**	**Supply**	**Transmission**	**Unknown**	**Grand Total**
Non-Qualifying	$ 136,110	$427,271	$ 82,827	$4,247,473	$ 95,077	$26,260	$1,179,644	$17,293,507	$2,128,693	$ 25,616,861
Qualifying	-	-	260,961	2,457,898	5,450,118	-	-	13,443,709	-	21,612,686
Grand Total	**$ 136,110**	**$427,271**	**$343,788**	**$6,705,370**	**$5,545,195**	**$26,260**	**$1,179,644**	**$30,737,216**	**$2,128,693**	**$ 47,229,547**

FUTURE 10 YEAR CULINARY WATER CAPITAL PROJECTS

In the next ten years, the City anticipates building various projects including a well, several storage improvements, and transmission lines. All construction estimates have been prepared in 2018 dollars. The City has determined that it will not include inflation in projected construction costs. The costs of future capital projects are defined in the corresponding Impact Fees Facilities Plan prepared by BC&A. As shown in Figure 3.3, project costs were sorted by whether they will meet 10-year impact fee qualifying demand, beyond ten-year demand, or non-qualifying (which includes portions of the projects that will be utilized by existing users).

The total cost of culinary water improvements to be built in ten years is $21,342,000 in 2018 dollars. Although the Impact Fees Act allows this cost to be increased for construction inflation the City has chosen to keep all future project costs at 2018 prices. $4,835,619 is the portion of the total future project cost that will serve the ten-year demand.

FIGURE 3.3: FUTURE CULINARY WATER CAPITAL PROJECT COSTS

Project Name	Year to be Constructed	2018 Cost	Construction Cost with Inflation	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non Impact Fee Qualifying
Production/Treatment						
Flight Park Well	2017	$ 2,369,000	$ 2,369,000	$ 999,718	$ 1,369,282	$ -
Source Subtotal		**$ 2,369,000**	**$ 2,369,000**	**$ 999,718**	**$ 1,369,282**	**$ -**
Storage						
West Side 1 (2.3 MG)	2017	$ 2,271,000	$ 2,271,000	$ 728,991	$ 1,542,009	$ -
600 East Replacement (2.3 MG)	2018	3,124,000	3,124,000	865,348	1,171,500	1,087,152
Holbrook Upper (0.8 MG)	2022	2,012,000	2,012,000	370,208	1,641,792	-
Sand Pit (2 MG)	2019	3,015,000	3,015,000	835,155	2,179,845	-
Storage Subtotal		**$ 10,422,000**	**$ 10,422,000**	**$ 2,799,702**	**$ 6,535,146**	**$ 1,087,152**
Transmission/Pumping						
To Pilgrims Booster	2019	$ 415,000	$ 415,000	$ 4,150	$ 266,430	$ 144,420
Holbrook Upper	2025	355,000	355,000	65,320	289,680	-
CWP to West Side 1 Tank	2020	237,000	237,000	100,014	136,986	-
West of River, North of 2100 N	2021	1,195,000	1,195,000	485,170	709,830	-
Bull River Rd	2018	207,000	207,000	11,385	109,089	86,526
West of River, South of 2100 N	2022	153,000	153,000	62,118	90,882	-
Sandpit Tank Connection	2019	1,553,000	1,553,000	55,908	847,938	649,154
400 E 400 N	2024	6,000	6,000	108	5,658	234
600 East Tank Connection	2018	3,706,000	3,706,000	202,672	3,503,328	-
Lehi Jr High	2022	188,000	188,000	3,948	105,468	78,584
900 N 1300 W	2018	18,000	18,000	990	9,486	7,524
1100 W Woods Dr	2023	5,000	5,000	75	2,835	2,090
Main St 2000 W	2022	26,000	26,000	546	14,586	10,868
200 S 1400 E	2022	237,000	237,000	4,977	132,957	99,066
1100 W 800 S	2024	3,000	3,000	30	1,716	1,254
Holbrook Upper	2022	202,000	202,000	37,168	164,832	-
Pilgrims Tank Booster-Phase 1	2019	45,000	45,000	1,620	24,570	18,810
Conveyance Subtotal		**$ 8,551,000**	**$ 8,551,000**	**$ 1,036,199**	**$ 6,416,271**	**$ 1,098,530**
Ten Year Total		**$ 21,342,000**	**$ 21,342,000**	**$ 4,835,619**	**$ 14,320,699**	**$ 2,185,682**

Source: Bowen Collins & Associates Culinary Water Impact Fee Facility Plan

**Future Inflation Was Not Included Per Direction of the City's Impact Fee Legal Counsel*

FUTURE CULINARY WATER REVENUE BONDS

In early 2018, the City anticipates issuing approximately $8M in water revenue bonds that will be split 50%/50% between culinary water and pressurized irrigation. The full projected debt service schedule is shown in Appendix G of this report. Only the interest and costs of issuance of the bond is added to the impact fee as the principal is already included as the cost of the project constructed. Interest and cost of issuance for the

entire bond totals $1,744,278 for the culinary water portion. Figure 3.4 shows that $515,472 or approximately 30% of the bond interest and costs of issuance will be included in the proposed impact fee.

FIGURE 3.4: FUTURE CULINARY WATER BOND INTEREST ALLOCATION

Series 2018	Bond Interest	$ to Existing / Project Level	$ Impact Fee Qualifying - 10 Year	$ Impact Fee Qualifying - Beyond 10 Year	Totals
West Side 1 (2.3 MG)	$ 734,246	$ -	$ 235,693	$ 498,553	$ 734,246
600 East Replacement (2.3 MG) - Bond	1,010,033	351,491	279,779	378,762	1,010,033
GRAND TOTAL	**$ 1,744,278**	**$ 351,491**	**$ 515,472**	**$ 877,315**	**$ 1,744,278**

CHAPTER 4: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires the impact fee analysis to estimate the proportionate share of the historic and future cost of system improvements that benefit new growth and can be recouped through impact fees. The proportionate share of all existing and future projects is shown in Figure 4.1. This chapter will show that the proposed impact fee is reasonably related to an ERU's impact on the culinary water system from future development activity.

MANNER OF FUNDING

The proportionate share analysis considers the manner of funding utilized for existing public facilities. Historically the City has funded existing infrastructure with revenue sources including water user rates and miscellaneous fees, water impact fees, and bond proceeds.

In the future, the City will rely solely upon user rate revenues to fund the operations and maintenance of the system. Some rate revenues may be used to pay impact fee qualifying expenses in years when impact fee revenues are insufficient to cover the qualifying cost. However, if rate revenues are used to pay what should be funded through impact fees (due to a shortfall in impact fee revenues) then the water operating fund will be repaid with impact fees.

Grant funding is not secured at this time; therefore, if any grants are received, future impact fees will be discounted according to the size of grant and what impact fee qualifying projects are funded by such grants.

Developer and Reimbursement Credits

If a project included in the Impact Fee Facilities Plan (or a project that will offset the demand for a system improvement that is listed in the IFFP) is constructed by a developer, then that developer is entitled to a credit against impact fees owed. (Utah Impact Fees Act, 11-36a-304(2)(f)).

Time-Price Differential

Utah Code 11-36a-301(2)(h) allows for the inclusion of a time-price differential to create fairness for costs of projects paid at different times. All users who pay an impact fee today or within the next ten years will benefit from projects to be constructed and included in the fee. Although permissible according to impact fee code, the City's legal counsel has recommended that the City not include inflation for future capital projects.

MAXIMUM LEGAL CULINARY WATER IMPACT FEE PER ERU

The maximum impact fee is based on the combination of individual costs for the components of production, treatment, storage, pumping, transmission, and allowable professional fees. Each fee for individual components is based upon the historic and future costs divided by the total and available capacities. The result is a very precise impact fee that complies with the Impact Fees Act. As shown in Figure 4.1, the maximum legal impact fee per ERU of culinary water demand is calculated to be $1,194.07.

Figure 4.1: City-Wide Culinary Water Proportionate Share/Cost Per ERU

Component	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (ERU)	Cost per ERU
CULINARY PRODUCTION/ TREATMENT					
Future 10 Year Capital Projects	$ 2,369,000	42.20%	$ 999,718	5,674	$ 176
Future Production Related Debt to be Issued - INTEREST ONLY	-	0.00%	-	5,674	-
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CULINARY STORAGE					
Future 10 Year Capital Projects	$ 10,422,000	26.86%	$ 2,799,702	5,674	$ 493
Future Storage Related Debt to be Issued - INTEREST ONLY	1,744,278	29.55%	515,472	5,674	91
Existing Storage Projects	5,450,118	5.54%	301,831	5,674	53
Existing Storage Related Debt - OUTSTANDING INTEREST	-	0.00%	-	5,674	-
Storage Subtotal	**$ 17,616,396**		**$ 3,617,005**		**$ 637.47**
CULINARY TRANSMISSION/PUMPING					
Future 10 Year Capital Projects	$ 8,551,000	12.12%	$ 1,036,199	5,674	$ 183
Future Transmission Related Debt to be Issued - INTEREST ONLY	-	0.00%	-	5,674	-
Existing Transmission Projects	13,704,670	6.10%	835,985	5,674	147
Existing Transmission Related Debt - OUTSTANDING INTEREST	-	0.00%	-	5,674	-
Transmission/Pumping Subtotal	**$ 22,255,670**		**$ 1,872,184**		**$ 329.96**
Professional Services/ Credits					
Unspent Impact Fee Funds (Excluding Uncommitted Funds)	-	0.00%	$ -	5,674	$ -
Credit for Projects Benefitting Existing Users*				5,674	(57.20)
Professional Services Expense	60,000	100%	60,000	5,674	11
Professional Services/Credits Subtotal	**60,000**		**60,000**		**(46.62)**
Total Impact Fee Per ERU	**$ 46,292,564**		**$ 7,099,705**		**$ 1,194.07**

***See Appendix H for credit calculation**

CHAPTER 5: CULINARY WATER IMPACT FEE CALCULATION

DETERMINATION OF RESIDENTIAL AND NON-RESIDENTIAL IMPACT FEES

Figure 5.1 shows the proposed maximum culinary water impact fee that the City can assess according to ERU or meter size. Single family residences are assessed a culinary water impact fee equivalent to one ERU which assumes the typical demand of 254.8 gpd for an average day demand. Non-residential connections and multi-family connections will be assessed a culinary impact fee based on meter size.

Multi-family complexes will be assessed according to the size of the master meter and not according to the number of doors multiplied by the cost per ERU. Many non-residential properties have fire flow for the building and if the sprinkler system feeds through an unmetered standpipe, then an impact fee is not assessed to the standpipe. However, there are master meters that are sized much larger due to fire sprinkler capacity than what the actual water demands of the building would require. In this case, the impact fee should be based on the size of meter that would best serve the needs of the building net of fire flow.

FIGURE 5.1: CITY-WIDE RESIDENTIAL CULINARY WATER IMPACT FEE

Unit Type	Fee per ERU	Meter Size	Equivalency Ratio	Impact Fee by Meter Size
Residential	$ 1,194.07	per dwelling unit	1.00	**$ 1,194.07**
Non-Residential/ Multi-Family Residential		3/4"	1.00	**1,194.07**
		1"	2.67	**3,184.19**
		1 1/2"	3.33	**3,980.23**
		2"	10.67	**12,736.75**
		3"	23.33	**27,861.64**
		4"	42.00	**50,150.95**
		6"	93.33	**111,446.56**
		8"	160.00	**191,051.25**

NON-STANDARD DEMAND ADJUSTMENTS

The City reserves the right under the Impact Fees Act (Utah Code 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 must include a provision that permits adjustment of the impact fee for a development based upon studies and data submitted by the developer that indicate a more realistic and accurate impact upon the City's infrastructure. The impact fee formula shown below in Figure 5.2 for a non-standard user is based upon the anticipated annual water demand.

FIGURE 5.2: CALCULATION OF NON-STANDARD IMPACT FEE

Non-Standard Users Impact Fee Formula
Step 1: Identify Estimated Average Annual Demand (Gallons) of Proposed
Step 2: Multiply Average Annual Demand by Impact Fee per Gallon of $0.013

APPENDICES: CERTIFICATION, SERVICE AREA MAP, IMPACT FEE CALCULATIONS

In accordance with Utah Code Annotated, 11-36a-306(2), Zions Public Finance, Inc., makes the following 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;
    b. cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
    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;
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.

Zions Public Finance makes this certification with the following caveats:

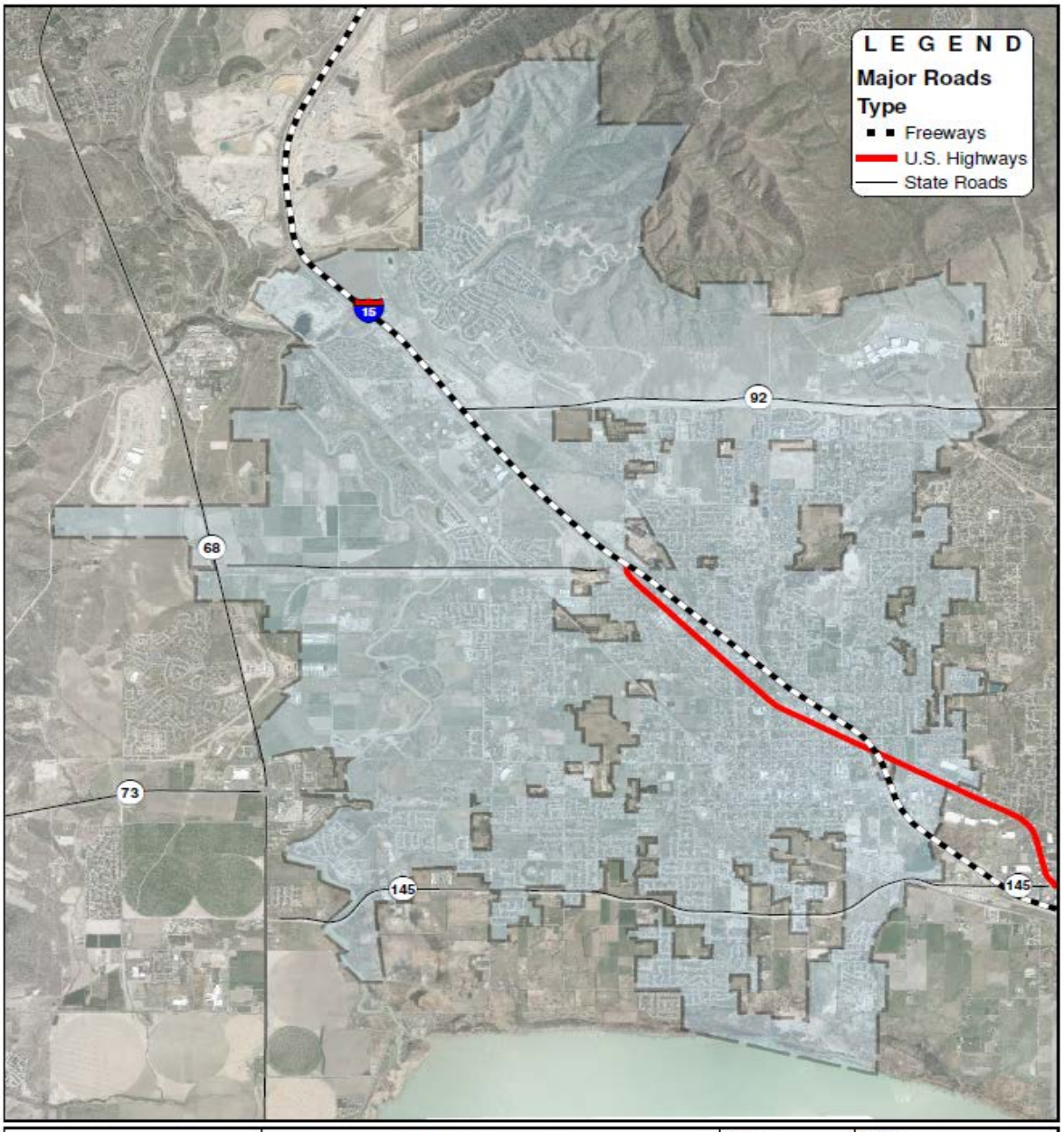
1. All of the recommendations for implementations of the Impact Fee Facilities Plan (IFFP) made in the IFFP or in the impact fee analysis are followed in their entirety by City staff and Council in accordance to the specific policies established for the Service Area.
2. If all or a portion of the IFFP or impact fee analysis are modified or amended, this certification is no longer valid.
3. All information provided to Zions Public Finance, Inc., its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by Lehi City and outside sources.

Dated: 4/6/2018

ZIONS PUBLIC FINANCE, INC.

APPENDIX A: MAP OF CULINARY WATER IMPACT FEE SERVICE AREA

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS



APPENDIX B: ERU DEMAND PROJECTIONS AND LEVEL OF SERVICE (LOS)

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE B.1: CURRENT AND FUTURE CULINARY WATER DEMANDS

Year	Single Family Units	Multifamily Units	Non-Residential Area (ksf)	Total City-Wide ERUs	Peak Day Demand (Mgd)	Peak Day Production Requirement (mgd)	Annual Demand (ac ft)
2016	13,230	3,536	12,486	17,849	7.24	9.62	5,094
2017	13,651	3,649	12,883	18,417	7.47	9.94	5,256
2018	14,071	3,761	13,280	18,984	7.70	10.26	5,216
2019	14,492	3,874	13,677	19,552	7.93	10.58	5,226
2020	14,912	3,986	14,074	20,119	8.16	10.90	5,742
2021	15,333	4,098	14,471	20,686	8.39	11.20	5,904
2022	15,753	4,211	14,868	21,254	8.62	11.50	6,066
2023	16,174	4,323	15,265	21,821	8.85	11.80	6,228
2024	16,595	4,435	15,661	22,388	9.08	12.10	6,390
2025	17,015	4,548	16,058	22,956	9.31	12.40	6,552
2026	17,436	4,660	16,455	23,523	9.54	12.70	6,714
2030	19,108	5,107	18,033	25,779	10.40	13.90	7,358
2040	23,288	6,224	21,978	31,419	12.70	17.00	8,967
2050	27,469	7,342	25,924	37,059	15.00	20.00	10,577
2060	31,649	8,459	29,869	42,699	17.30	23.00	12,187
Buildout	32,902	8,922	78,318	51,269	20.90	27.90	14,770

TABLE B.2: CULINARY WATER DEMAND (ERU)

Ten-Year Culinary Water Demand (ERU)	
2016 Demand (ERU)	17,849
2026 Demand (ERU)	23,523
Differential	5,674
% Undeveloped	24%
ERUs Added in Ten Years	**5,674**

Source: IFFP for Culinary Water Prepared by BC&A

APPENDIX C: CULINARY WATER LEVEL OF SERVICE (LOS) ANALYSIS

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE C.1: CULINARY WATER LEVEL OF SERVICE BY COMPONENT

	Performance Standard	Current Level of Service	Proposed Level of Service
Production Capacity			
Production Capacity (gpd/ERU)	540	838	540
Pumping Capacity			
Pumping Capacity (gpd/ERU)	406	585	406
Storage			
Storage (gallons/ERU)	400	500	400
Transmission and Distribution			
Peak Day Demand Pressure (psi)	40	35	40
Peak Hour Demand Pressure (psi)	30	29	30
Minimum Available Fire Flow at 50 psi during Peak Day Demand (gpm)	550	146	550

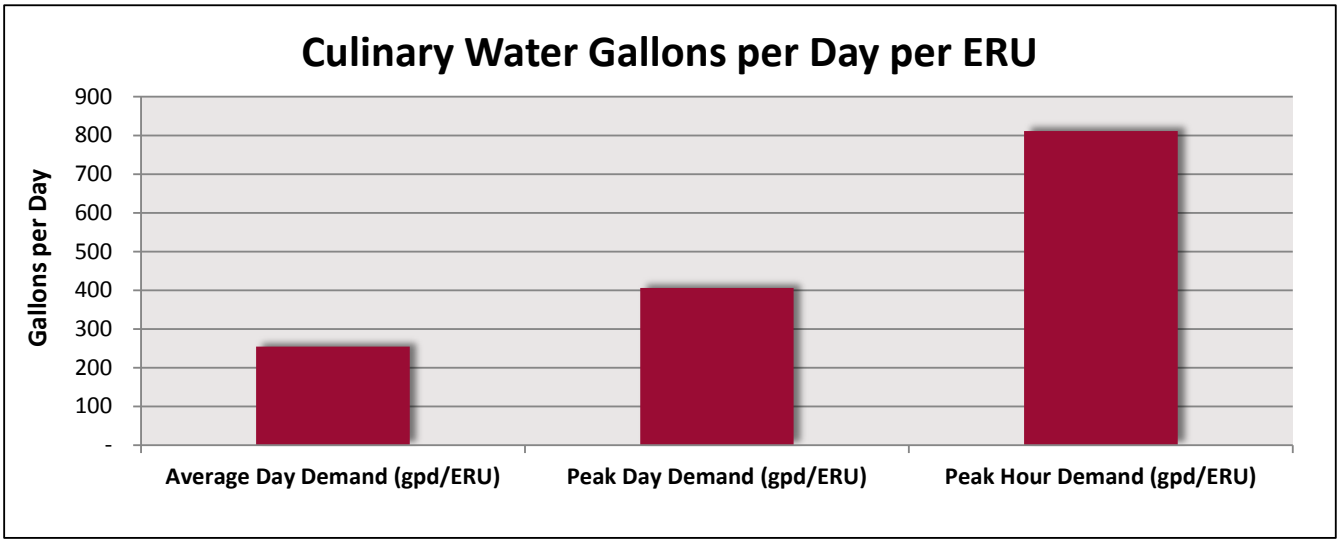


TABLE C.2: CULIINARY WATER LEVEL OF SERVICE PER ERU

	Level of Service
Average Day Demand (gpd/ERU)	254.80
Peak Day Demand (gpd/ERU)	405.70
Peak Hour Demand (gpd/ERU)	811.40

Source: Water Impact Fee Facilities Plan Table 1 Prepared By Bowen Collins & Associates

APPENDIX D: CULINARY WATER 10 YEAR CAPITAL PROJECTS

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE D.1: CULINARY WATER CAPITAL PROJECTS — **Inflation Rate*** 0.00%

Project Name	Project ID	% to Existing / Project Level	% Impact Fee Qualifying - 10 Year	% Impact Fee Qualifying - Beyond 10 Year	Year to be Constructed	2018 Cost	Construction Cost with Inflation	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non Impact Fee Qualifying
Production/Treatment										
Flight Park Well	CS-1	0.0%	42.2%	57.8%	2017	$ 2,369,000	$ 2,369,000	$ 999,718	$ 1,369,282	$ -
Source Subtotal						**$ 2,369,000**	**$ 2,369,000**	**$ 999,718**	**$ 1,369,282**	**$ -**
Storage										
West Side 1 (2.3 MG)	CST-1	0.0%	32.1%	67.9%	2017	$ 2,271,000	$ 2,271,000	$ 728,991	$ 1,542,009	$ -
600 East Replacement (2.3 MG)	CST-2	34.8%	27.7%	37.5%	2018	3,124,000	3,124,000	865,348	1,171,500	1,087,152
Holbrook Upper (0.8 MG)	CST-4	0.0%	18.4%	81.6%	2022	2,012,000	2,012,000	370,208	1,641,792	-
Sand Pit (2 MG)	CST-5	0.0%	27.7%	72.3%	2019	3,015,000	3,015,000	835,155	2,179,845	-
Storage Subtotal						**$ 10,422,000**	**$ 10,422,000**	**$ 2,799,702**	**$ 6,535,146**	**$ 1,087,152**
Transmission/Pumping										
To Pilgrims Booster	CB-1	34.80%	1.00%	64.20%	2019	$ 415,000	$ 415,000	$ 4,150	$ 266,430	$ 144,420
Holbrook Upper	CB-2	0.00%	18.40%	81.60%	2025	355,000	355,000	65,320	289,680	-
CWP to West Side 1 Tank	CB-3	0.00%	42.20%	57.80%	2020	237,000	237,000	100,014	136,986	-
West of River, North of 2100 N	CC-03	0.0%	40.6%	59.4%	2021	1,195,000	1,195,000	485,170	709,830	-
Bull River Rd	CC-07	41.8%	5.5%	52.7%	2018	207,000	207,000	11,385	109,089	86,526
West of River, South of 2100 N	CC-09	0.0%	40.6%	59.4%	2022	153,000	153,000	62,118	90,882	-
Sandpit Tank Connection	CC-10	41.8%	3.6%	54.6%	2019	1,553,000	1,553,000	55,908	847,938	649,154
400 E 400 N	CC-11	3.9%	1.8%	94.3%	2024	6,000	6,000	108	5,658	234
600 East Tank Connection	CC-17	0.0%	5.5%	94.5%	2018	3,706,000	3,706,000	202,672	3,503,328	-
Lehi Jr High	CC-23	41.8%	2.1%	56.1%	2022	188,000	188,000	3,948	105,468	78,584
900 N 1300 W	CC-27	41.8%	5.5%	52.7%	2018	18,000	18,000	990	9,486	7,524
1100 W Woods Dr	CC-28	41.8%	1.5%	56.7%	2023	5,000	5,000	75	2,835	2,090
Main St 2000 W	CC-34	41.8%	2.1%	56.1%	2022	26,000	26,000	546	14,586	10,868
200 S 1400 E	CC-39	41.8%	2.1%	56.1%	2022	237,000	237,000	4,977	132,957	99,066
1100 W 800 S	CC-42	41.8%	1.0%	57.2%	2024	3,000	3,000	30	1,716	1,254
Holbrook Upper	CC-44	0.0%	18.4%	81.6%	2022	202,000	202,000	37,168	164,832	-
Pilgrims Tank Booster-Phase 1	CC-52	41.8%	3.6%	54.6%	2019	45,000	45,000	1,620	24,570	18,810
Conveyance Subtotal						**$ 8,551,000**	**$ 8,551,000**	**$ 1,036,199**	**$ 6,416,271**	**$ 1,098,530**
Ten Year Total						**$ 21,342,000**	**$ 21,342,000**	**$ 4,835,619**	**$ 14,320,699**	**$ 2,185,682**

Source: Bowen Collins & Associates Culinary Water Impact Fee Facility Plan

**Future Inflation Was Not Included Per Direction of the City's Impact Fee Legal Counsel*

APPENDIX E: HISTORIC CITY ASSET DATA

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

Table E.1: Detailed Asset List

	A	B	C	D	E	F	G	H	I	J	K	
1	Category	Description	Owning System	Function	Type	Service Life	In Service	Qualifying	Acquire Date	Function	Original Cost	1
2	Water Rights	Water Rights (Jordan)	Culinary	Supply	System	-	Yes	Non-Qualifying			529,644	2
3	Water Rights	Water Rights-Cemetery	Culinary	Supply	System	-	Yes	Non-Qualifying			650,000	3
4	Land	Land	Culinary	Transmission	System	-	Yes	Qualifying			31,085	4
5	Land	Land	Culinary	Transmission	System	-	Yes	Qualifying			8,637	5
6	Land	Land-Alpine Springs Property	Culinary	Source	System	-	Yes	Non-Qualifying			378,386	6
7	Land	Land-Waterline Encroachment	Culinary	Transmission	System	-	Yes	Qualifying			3,575	7
8	Land	Land-100S Row Road	Culinary	Transmission	System	-	Yes	Qualifying			56,936	8
9	Land	Land	Culinary	Transmission	System	-	Yes	Qualifying			407,500	9
10	Land	Land	Culinary	Transmission	System	-	Yes	Qualifying			5,149	10
11	Land	Land	Culinary	Transmission	System	-	Yes	Qualifying			7,499	11
12	Land	Lamburt Property Purchase	Culinary	Transmission	System	-	Yes	Qualifying			100,000	12
13	Buildings/Structures	BS-Prior 1959	Culinary	Unknown	System	50.00	Yes	Non-Qualifying			94,774	13
14	Buildings/Structures	BS-1959	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1959		1,152	14
15	Buildings/Structures	BS-1960	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1960		79	15
16	Buildings/Structures	BS-1964	Culinary	Unknown	System	10.00	Yes	Non-Qualifying	1964		226	16
17	Buildings/Structures	BS-1966	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1966		2,410	17
18	Buildings/Structures	BS-1968	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1968		216	18
19	Buildings/Structures	BS-1970	Culinary	Unknown	System	10.00	Yes	Non-Qualifying	1970		2,217	19
20	Buildings/Structures	BS-1973	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1973		1,426	20
21	Buildings/Structures	BS-1974	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1974		1,276	21
22	Buildings/Structures	BS-1975	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1975		1,823	22
23	Buildings/Structures	BS-1976	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1976		1,393	23
24	Buildings/Structures	BS-1977	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1977		1,825	24
25	Buildings/Structures	BS-1978	Culinary	Unknown	System	10.00	Yes	Non-Qualifying	1978		1,846	25
26	Buildings/Structures	BS-1979	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1979		28,907	26
27	Buildings/Structures	BS-1980	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1980		17,159	27
28	Buildings/Structures	BS-1984	Culinary	Unknown	System	50.00	Yes	Non-Qualifying	1984		30,480	28
29	Buildings/Structures	BS-1985	Culinary	Unknown	System	10.00	Yes	Non-Qualifying	1985		6,000	29
30	Buildings/Structures	BS-1986	Culinary	Unknown	System	35.00	Yes	Non-Qualifying	1986		13,000	30
31	Buildings/Structures	BS-1987	Culinary	Unknown	System	10.00	Yes	Non-Qualifying	1987		1,904	31
32	Buildings/Structures	BS-1988	Culinary	Unknown	System	10.00	Yes	Non-Qualifying	1988		2,759	32
33	Buildings/Structures	Office Addition to Ex Wtr Bld	Culinary	Unknown	System	50.00	Yes	Non-Qualifying			25,751	33
34	Buildings/Structures	Pump House Exhaust Fan	Culinary	Unknown	System	10.00	Yes	Non-Qualifying			3,779	34
35	Buildings/Structures	Building	Culinary	Unknown	System	30.00	Yes	Non-Qualifying			458,474	35
36	Buildings/Structures	Building Improvements	Culinary	Unknown	System	20.00	Yes	Non-Qualifying			21,669	36
37	Buildings/Structures	Water Storage Building	Culinary	Unknown	System	20.00	Yes	Non-Qualifying			30,966	37
38	Improvements	Water Dist-Prior 1953	Culinary	Transmission	System	50.00	No	Non-Qualifying			10,159	38
39	Improvements	Meters & Hydrants-1953	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1953		9,882	39
40	Improvements	Water Dist-1953	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1953		12,618	40
41	Improvements	Meters & Hydrants-1954	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1954		2,611	41
42	Improvements	Water Dist-1954	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1954		885	42
43	Improvements	Water Dist-1955	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1955		3,535	43
44	Improvements	Meters & Hydrants-1955	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1955		1,553	44
45	Improvements	Water Dist-1956	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1956		6,093	45
46	Improvements	Meters & Hydrants-1956	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1956		1,657	46
47	Improvements	Water Dist-1957	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1957		2,090	47
48	Improvements	Meters & Hydrants-1957	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1957		898	48
49	Improvements	Water Dist-1958	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1958		9,678	49
50	Improvements	Meters & Hydrants-1958	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1958		1,412	50
51	Improvements	Water Dist-1959	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1959		14,001	51
52	Improvements	Water Dist-1960	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1960		7,737	52
53	Improvements	Water Dist-1961	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1961		2,270	53
54	Improvements	Water Dist-1963	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1963		20,150	54
55	Improvements	Water Dist-1964	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1964		4,923	55
56	Improvements	Reservoirs-1965	Culinary	Storage	System	50.00	Yes	Non-Qualifying	1965		52,300	56
57	Improvements	Water Dist-1965	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1965		447,738	57
58	Improvements	Pumping Equipment-1965	Culinary	Pumping	System	20.00	Yes	Non-Qualifying	1965		12,628	58
59	Improvements	Pumping Equipment-1966	Culinary	Pumping	System	20.00	Yes	Non-Qualifying	1966		197	59
60	Improvements	Water Dist-1966	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1966		10,839	60
61	Improvements	Water Dist-1967	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1967		16,190	61
62	Improvements	Water Dist-1968	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1968		9,116	62
63	Improvements	Reservoirs-1969	Culinary	Storage	System	50.00	Yes	Non-Qualifying	1969		1,046	63
64	Improvements	Water Dist-1969	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	1969		13,810	64
65	Improvements	Water Dist-1979	Culinary	Transmission	System	30.00	Yes	Non-Qualifying	1979		20,722	65
66	Improvements	Reservoirs-1970	Culinary	Storage	System	50.00	No	Non-Qualifying	1970		41,731	66

67	Improvements	Water Dist-1970	Culinary	Transmission	System	50.00	Yes	Qualifying	1970		295,207	67
68	Improvements	Meters & Hydrants-1971	Culinary	Transmission	System	30.00	Yes	Qualifying	1971		7,178	68
69	Improvements	Meters & Hydrants-1972	Culinary	Transmission	System	30.00	Yes	Qualifying	1972		6,351	69
70	Improvements	Water Dist-1972	Culinary	Transmission	System	10.00	Yes	Qualifying	1972		5,543	70
71	Improvements	Meters & Hydrants-1973	Culinary	Transmission	System	30.00	Yes	Qualifying	1973		7,400	71
72	Improvements	Meters & Hydrants-1974	Culinary	Transmission	System	30.00	Yes	Qualifying	1974		14,093	72
73	Improvements	Meters & Hydrants-1975	Culinary	Transmission	System	30.00	Yes	Qualifying	1975		7,916	73
74	Improvements	Pumping Equipment-1975	Culinary	Pumping	System	20.00	Yes	Non-Qualifying	1975		10,487	74
75	Improvements	Water Dist-1975	Culinary	Transmission	System	30.00	Yes	Qualifying	1975		2,904	75
76	Improvements	Meters & Hydrants-1976	Culinary	Transmission	System	30.00	Yes	Qualifying	1976		1,833	76
77	Improvements	Pumping Equipment-1976	Culinary	Pumping	System	20.00	Yes	Non-Qualifying	1976		2,400	77
78	Improvements	Water Dist-1977	Culinary	Transmission	System	30.00	Yes	Qualifying	1977		5,945	78
79	Improvements	Meters & Hydrants-1977	Culinary	Transmission	System	30.00	Yes	Qualifying	1977		9,778	79
80	Improvements	Water Dist-1978	Culinary	Transmission	System	30.00	Yes	Qualifying	1978		23,288	80
81	Improvements	Meters & Hydrants-1978	Culinary	Transmission	System	30.00	Yes	Qualifying	1978		9,712	81
82	Improvements	Meters & Hydrants-1979	Culinary	Transmission	System	30.00	Yes	Qualifying	1979		10,361	82
83	Improvements	Pumping Equip-1979	Culinary	Pumping	System	20.00	Yes	Non-Qualifying	1979		51,955	83
84	Improvements	Water Dist-1980	Culinary	Transmission	System	50.00	Yes	Qualifying	1980		236,210	84
85	Improvements	Water Dist-1981	Culinary	Transmission	System	30.00	Yes	Qualifying	1981		3,175	85
86	Improvements	Water Dist-1982	Culinary	Transmission	System	30.00	Yes	Qualifying	1982		2,823	86
87	Improvements	Meters & Hydrants-1983	Culinary	Transmission	System	20.00	Yes	Qualifying	1983		5,565	87
88	Improvements	Purification Equip-1984	Culinary	Source	System	10.00	Yes	Non-Qualifying	1984		2,210	88
89	Improvements	Meters & Hydrants-1984	Culinary	Transmission	System	20.00	Yes	Qualifying	1984		4,020	89
90	Improvements	Water Dist-1984	Culinary	Transmission	System	50.00	Yes	Qualifying	1984		66,039	90
91	Improvements	Meters & Hydrants-1985	Culinary	Transmission	System	20.00	Yes	Qualifying	1985		7,933	91
92	Improvements	Pumping Equip-1985	Culinary	Pumping	System	10.00	Yes	Non-Qualifying	1985		2,116	92
93	Improvements	Water Dist-1986	Culinary	Transmission	System	50.00	Yes	Qualifying	1986		115,231	93
94	Improvements	Meters & Hydrants-1986	Culinary	Transmission	System	20.00	Yes	Qualifying	1986		21,358	94
95	Improvements	Meters & Hydrants-1987	Culinary	Transmission	System	20.00	Yes	Qualifying	1987		8,774	95
96	Improvements	Water Dist-1987	Culinary	Transmission	System	50.00	Yes	Qualifying	1987		191,215	96
97	Improvements	Pumping Equip-1987	Culinary	Pumping	System	10.00	Yes	Non-Qualifying	1987		3,046	97
98	Improvements	Meters & Hydrants-1988	Culinary	Transmission	System	20.00	Yes	Qualifying	1988		4,287	98
99	Improvements	Meters & Hydrants-1989	Culinary	Transmission	System	20.00	Yes	Qualifying	1989		16,801	99
100	Improvements	Pressure Irrigation-1990	PI	Transmission	System	50.00	Yes	Qualifying	1990		2,650,398	100
101	Improvements	Pressure Irrigation-1990	PI	Transmission	System	50.00	Yes	Qualifying	1990		4,857	101
102	Improvements	Pressure Irrigation-1991	PI	Transmission	System	50.00	Yes	Qualifying	1991		199,279	102
103	Improvements	Water Dist-1991	Culinary	Transmission	System	30.00	Yes	Qualifying	1991		16,494	103
104	Improvements	Water Dist-1992	Culinary	Transmission	System	30.00	Yes	Qualifying	1992		32,196	104
105	Improvements	Water Dist-1993	Culinary	Transmission	System	30.00	Yes	Qualifying	1993		24,372	105
106	Improvements	Water System-1994	Culinary	Transmission	System	50.00	Yes	Qualifying	1994		18,996	106
107	Improvements	Water Line Upgrade	Culinary	Transmission	System	50.00	Yes	Qualifying			8,523	107
108	Planning	Water Impact Work	Culinary	Planning	System	50.00	Yes	Non-Qualifying			60,900	108
109	Improvements	Low Hills Water Tank	Culinary	Storage	System	50.00	Yes	Qualifying			513,268	109
110	Planning	Water Impact Work	Culinary	Planning	System	50.00	Yes	Non-Qualifying			19,378	110
111	Improvements	Water System-1995	Culinary	Transmission	System	50.00	Yes	Qualifying			14,170	111
112	Improvements	Water Line Upgrade	Culinary	Transmission	System	50.00	Yes	Qualifying			87,299	112
113	Improvements	Main Street-CDBG Grant	Culinary	Transmission	System	50.00	Yes	Non-Qualifying			88,074	113
114	Improvements	Southeast Util Extension	Culinary	Transmission	System	50.00	Yes	Qualifying			70,114	114
115	Improvements	Culinary Water Imprvmnts-R	Culinary	Transmission	System	50.00	Yes	Qualifying			969,028	115
116	Improvements	Meter Network System	Culinary	Transmission	System	20.00	Yes	Qualifying			2,798	116
117	Improvements	Pilg Land Upsize	Culinary	Transmission	Project	50.00	Yes	Qualifying			83,034	117
118	Improvements	Carterridge Sed Basin	Culinary	Source	System	50.00	Yes	Non-Qualifying			27,852	118
119	Improvements	Continue Center St Storm	Storm	Storm	System	50.00	Yes	Non-Qualifying			26,260	119
120	Improvements	Pipe Upsize	Culinary	Transmission	System	50.00	Yes	Qualifying			10,340	120
121	Improvements	Pipe Upsize-11th W	Culinary	Transmission	System	50.00	Yes	Qualifying			2,602	121
122	Improvements	Pipe Upsize	Culinary	Transmission	System	50.00	Yes	Qualifying			6,364	122
123	Improvements	Water Cap	Culinary	Unknown	System	50.00	Yes	Non-Qualifying			174,045	123
124	Improvements	Green Prk Sub Plat A Oversize	Culinary	Transmission	Project	50.00	Yes	Non-Qualifying			53,605	124
125	Improvements	1200E 900N Water	Culinary	Transmission	System	50.00	Yes	Qualifying			20,196	125
126	Improvements	500N State Street	Culinary	Transmission	System	50.00	Yes	Qualifying			14,749	126
127	Improvements	2300 W to State Street	Culinary	Transmission	System	50.00	Yes	Qualifying			106,840	127
128	Improvements	500W 500S Water Main	Culinary	Transmission	System	50.00	Yes	Qualifying			106,842	128
129	Improvements	600 E and 500S	Culinary	Transmission	System	50.00	Yes	Qualifying			26,381	129
130	Improvements	10" Spring Line Highland	Culinary	Transmission	System	50.00	Yes	Qualifying			16,044	130
131	Improvements	Culinary Water Improvement	Culinary	Transmission	System	50.00	Yes	Qualifying			133,960	131
132	Improvements	Low Hills Telemetry Equip	Culinary	Equipment	System	10.00	Yes	Non-Qualifying			6,750	132
133	Improvements	Water Tank	Culinary	Storage	System	50.00	Yes	Qualifying			8,370	133
134	Improvements	300 W (1500 No to 1700 No)	Culinary	Transmission	System	50.00	Yes	Qualifying			34,992	134
135	Improvements	Misc System Improvements 20	Culinary	Transmission	System	50.00	Yes	Qualifying			121,326	135
136	Improvements	Improvements- Paul Will Sub	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			5,732	136
137	Improvements	Green Park Oversizing	Culinary	Transmission	System	50.00	Yes	Qualifying			57,000	137
138	Improvements	Improvements-Carlson HGHT	Culinary	Transmission	System	50.00	Yes	Qualifying			31,706	138
139	Improvements	Sensus Meters, Caps	Culinary	Transmission	System	20.00	Yes	Qualifying			60,385	139
140	Contributed	Jordan Meadows Improment	Culinary	Transmission	Project	50.00	Yes	Non-Qualifying			27,192	140

141	Improvements	500 No State Improvements	Culinary	Transmission	System	50.00	Yes	Qualifying			21,154	141
142	Improvements	Water System Improvements	Culinary	Transmission	System	20.00	Yes	Qualifying			55,250	142
143	Improvements	900 N Waterline Installation	Culinary	Transmission	System	40.00	Yes	Qualifying			212,073	143
144	Improvements	SID ENGN &CNST	Culinary	Transmission	System	30.00	Yes	Qualifying			307,112	144
145	Improvements	2001 WTR Line Projects	Culinary	Transmission	System	30.00	Yes	Qualifying			70,675	145
146	Improvements	Misc Improvements	Culinary	Transmission	System	30.00	Yes	Qualifying			10,864	146
147	Improvements	Sensus MXU2 Handheld Units	Culinary	Equipment	System	10.00	Yes	Non-Qualifying			129,360	147
148	Improvements	Pilgrims Water Tank	Culinary	Storage	System	25.00	Yes	Qualifying			1,425,653	148
149	Improvements	Traverse Mtn Tank & Lines	Culinary	Storage	System	25.00	Yes	Qualifying			69,881	149
150	Improvements	Construction for Culinary	Culinary	Unknown	System	25.00	Yes	Non-Qualifying			16,054	150
151	Improvements	03 Culinary Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying			415,248	151
152	Improvements	900 North Proj-Construction	Culinary	Transmission	System	30.00	Yes	Qualifying			11,122	152
153	Improvements	Water Meters	Culinary	Transmission	System	25.00	Yes	Qualifying			592,399	153
154	Improvements	Water Improvements	Culinary	Transmission	System	25.00	Yes	Qualifying			52,444	154
155	Contributed	Subdivision Development	Culinary	Transmission	Project	25.00	Yes	Non-Qualifying			99,571	155
156	Improvements	1996 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	1996		95,700	156
157	Improvements	1997 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	1997		79,200	157
158	Improvements	1998 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	1998		181,500	158
159	Improvements	1999 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	1999		280,500	159
160	Improvements	2000 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	2000		303,600	160
161	Improvements	2001 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	2001		300,300	161
162	Improvements	2002 Culinary Water Project	Culinary	Transmission	System	50.00	Yes	Qualifying	2002		330,000	162
163	Contributed	2003 Contributed Capital	Culinary	Transmission	System	50.00	Yes	Non-Qualifying	2003		1,293,150	163
164	Improvements	Pressure Groute	Culinary	Transmission	System	30.00	Yes	Qualifying			4,588	164
165	Improvements	1900 S Pipe	Culinary	Transmission	System	30.00	Yes	Qualifying			5,703	165
166	Improvements	Pressurized Irrig Upsized	PI	Transmission	System	30.00	Yes	Non-Qualifying			30,362	166
167	Improvements	Pipe	Culinary	Transmission	System	10.00	Yes	Qualifying			6,718	167
168	Improvements	2003 Water Lines Projects	Culinary	Transmission	System	30.00	Yes	Qualifying	2003		5,716	168
169	Improvements	Water Lines Project	Culinary	Transmission	System	30.00	Yes	Qualifying			5,680	169
170	Improvements	Water Lines Project	Culinary	Transmission	System	30.00	Yes	Qualifying			184,340	170
171	Improvements	Water Lines Project	Culinary	Transmission	System	30.00	Yes	Qualifying			5,280	171
172	Improvements	Pressure Reduction Station	Culinary	Transmission	System	30.00	Yes	Qualifying			43,000	172
173	Improvements	Water Lines Project	Culinary	Transmission	System	30.00	Yes	Qualifying			5,934	173
174	Improvements	Water Lines Project	Culinary	Transmission	System	30.00	Yes	Qualifying			64,265	174
175	Improvements	Record Inventory	Culinary	Unknown	System	30.00	Yes	Non-Qualifying			55,000	175
176	Improvements	2004 Water Improvements	Culinary	Transmission	System	30.00	Yes	Qualifying	2004		9,018	176
177	Improvements	Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying			50,529	177
178	Improvements	Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying			7,870	178
179	Improvements	Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying			25,450	179
180	Improvements	Dist of Inventory	Culinary	Unknown	System	10.00	Yes	Non-Qualifying			11,297	180
181	Improvements	Dist of Inventory	Culinary	Unknown	System	10.00	Yes	Non-Qualifying			8,473	181
182	Improvements	Record Inventory	Culinary	Unknown	System	30.00	Yes	Non-Qualifying			212,818	182
183	Improvements	Alpine Springs Improvements	Culinary	Source	System	30.00	Yes	Non-Qualifying			239,227	183
184	Improvements	Infrastructure from Subdiv	Culinary	Transmission	Project	50.00	Yes	Non-Qualifying			183,862	184
185	Improvements	600 E & Pilgrim Project	Culinary	Transmission	System	50.00	Yes	Qualifying			125,443	185
186	Improvements	Main Street Project	Culinary	Transmission	System	50.00	Yes	Qualifying			12,398	186
187	Improvements	3200 N Project	Culinary	Transmission	System	50.00	Yes	Qualifying			13,994	187
188	Improvements	PRV Station	Culinary	Transmission	System	50.00	Yes	Qualifying			5,000	188
189	Improvements	Water Line Project	Culinary	Transmission	System	50.00	Yes	Qualifying			16,516	189
190	Improvements	Street Alterations 1st West	Culinary	Transmission	System	50.00	Yes	Qualifying			21,281	190
191	Improvements	2003 Waterline Projects	Culinary	Transmission	System	50.00	Yes	Qualifying	2003		5,000	191
192	Improvements	700 S. Willow Way	Culinary	Transmission	System	50.00	Yes	Qualifying			83,040	192
193	Improvements	850 East Project	Culinary	Transmission	System	50.00	Yes	Qualifying			7,362	193
194	Contributed	Developer's Contributions	Culinary	Transmission	Project	50.00	Yes	Non-Qualifying			1,294,529	194
195	Improvements	Electrical for Pumphouse	Culinary	Source	System	50.00	Yes	Non-Qualifying			12,862	195
196	Improvements	Equip. for Pilgrims Landing	Culinary	Source	System	50.00	Yes	Non-Qualifying			5,550	196
197	Improvements	Ratchet	Culinary	Transmission	System	50.00	Yes	Qualifying			5,291	197
198	Improvements	Improvements	Culinary	Transmission	System	50.00	Yes	Qualifying			10,947	198
199	Improvements	Water Inventory	Culinary	Transmission	System	50.00	Yes	Qualifying			59,700	199
200	Improvements	Water Inventory	Culinary	Transmission	System	50.00	Yes	Qualifying			464,096	200
201	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			123,590	201
202	Improvements	2006 Culinary Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying	2006		26,890	202
203	Improvements	Culinary Water Capital Impro	Culinary	Transmission	System	30.00	Yes	Qualifying			245,518	203
204	Improvements	Subdivision Infrastructure I	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			472,006	204
205	Improvements	PRV Station	Culinary	Transmission	System	50.00	Yes	Qualifying			5,000	205
206	Contributed	2006 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2006		2,313,534	206
207	Planning	Water Capital Impact Fee Wor	Culinary	Planning	System	30.00	Yes	Non-Qualifying			346,993	207
208	Improvements	2007 Culinary Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying	2007		186,797	208
209	Improvements	Capital Improvements	Culinary	Transmission	System	30.00	Yes	Qualifying			19,646	209
210	Improvements	Water Inventory	Culinary	Unknown	System	30.00	Yes	Non-Qualifying			751,813	210
211	Contributed	2007 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2007		2,888,395	211
212	Improvements	Water Impact Fee Work	Culinary	Transmission	System	30.00	Yes	Qualifying			306,832	212
213	Improvements	Culinary Water Project	Culinary	Transmission	System	30.00	Yes	Qualifying			14,912	213
214	Improvements	Water Capital Improvements	Culinary	Transmission	System	30.00	Yes	Qualifying			316,023	214

215	Contributed	2008 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2008		1,054,179	215
216	Improvements	2008 Water Inventory	Culinary	Unknown	System	30.00	Yes	Non-Qualifying	2008		83,033	216
217	Improvements	Inventory 2008/2009	Culinary	Unknown	System	30.00	Yes	Non-Qualifying			31,165	217
218	Contributed	Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			22,260	218
219	Improvements	Low Hills Tank	Culinary	Storage	System	30.00	Yes	Qualifying			1,011,684	219
220	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			264,637	220
221	Contributed	2009 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2009		765,370	221
222	Contributed	Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			61,863	222
223	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			16,018	223
224	Contributed	2010 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2010		178,743	224
225	Contributed	Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			37,130	225
226	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			8,912	226
227	Contributed	Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			168,111	227
228	Improvements	2010-2011 Water Inventory	Culinary	Unknown	System	30.00	Yes	Non-Qualifying			33,485	228
229	Improvements	Vialetto Water Tank	Culinary	Storage	System	30.00	Yes	Qualifying			1,992,400	229
230	Improvements	Alpine Springs	Culinary	Source	System	30.00	Yes	Non-Qualifying			149,126	230
231	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			19,820	231
232	Contributed	Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			156,353	232
233	Contributed	Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			366,342	233
234	Improvements	Murdock Canal Enclosure	Culinary	Source	System	30.00	Yes	Non-Qualifying			13,732	234
235	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			124,138	235
236	Contributed	Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			94,881	236
237	Contributed	2013 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2013		437,747	237
238	Improvements	Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying			56,517	238
239	Contributed	Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			191,174	239
240	Improvements	Gray Well	Culinary	Source	System	30.00	Yes	Non-Qualifying			574,142	240
241	Improvements	Adobe Loop	Culinary	Transmission	System	30.00	Yes	Qualifying			187,861	241
242	Contributed	2014 Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2014		1,124,846	242
243	Improvements	2015 Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying	2015		192,854	243
244	Contributed	2015 Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2015		326,478	244
245	Improvements	Gray Well Addt'l Improvement	Culinary	Source	System	30.00	Yes	Non-Qualifying			7,537	245
246	Contributed	2014-2015 Developer Contributior	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			1,479,546	246
247	Improvements	300 W Frontage Rd Water Line	Culinary	Transmission	System	30.00	Yes	Qualifying			71,360	247
248	Contributed	2016 Subdivision Development	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying	2016		392,672	248
249	Improvements	2016 Pipe Oversizing	Culinary	Transmission	System	30.00	Yes	Qualifying	2016		40,487	249
250	Improvements	Spring Line to Low Hills Tank	Culinary	Storage	System	30.00	Yes	Qualifying			428,862	250
251	Improvements	Traverse Booster w/piping	Culinary	Pumping	System	30.00	Yes	Qualifying			260,961	251
252	Improvements	Sandpit Well	Culinary	Source	System	30.00	Yes	Qualifying			2,457,898	252
253	Contributed	Developer Contribution	Culinary	Transmission	Project	30.00	Yes	Non-Qualifying			1,055,232	253
254	Wells,Pumps	Well Pumps-Prior 1948	Culinary	Source	System	30.00	Yes	Non-Qualifying			88,381	254
255	Wells,Pumps	Well Pumps-1948	Culinary	Source	System	30.00	Yes	Non-Qualifying	1948		4,255	255
256	Wells,Pumps	Well Pumps-1949	Culinary	Source	System	30.00	Yes	Non-Qualifying	1949		5,905	256
257	Wells,Pumps	Well Pumps-1958	Culinary	Source	System	30.00	Yes	Non-Qualifying	1958		8,794	257
258	Wells,Pumps	Well Pumps-1966	Culinary	Source	System	30.00	Yes	Non-Qualifying	1966		484	258
259	Wells,Pumps	Well Pumps-1972	Culinary	Source	System	30.00	Yes	Non-Qualifying	1972		450	259
260	Wells,Pumps	Well Pumps-1975	Culinary	Source	System	30.00	Yes	Non-Qualifying	1975		2,052	260
261	Wells,Pumps	Well Pumps-1977	Culinary	Source	System	30.00	Yes	Non-Qualifying	1977		168	261
262	Wells,Pumps	Well Pumps-1978	Culinary	Source	System	30.00	Yes	Non-Qualifying	1978		1,400	262
263	Wells,Pumps	Well Pumps-1979	Culinary	Source	System	30.00	Yes	Non-Qualifying	1979		51,955	263
264	Wells,Pumps	Well Pumps-1986	Culinary	Source	System	30.00	Yes	Non-Qualifying	1986		213,791	264
265	Wells,Pumps	Well Pumps-1987	Culinary	Source	System	30.00	Yes	Non-Qualifying	1987		21,561	265
266	Wells,Pumps	Well- East Rolling Mills	Culinary	Source	System	30.00	Yes	Non-Qualifying			26,104	266
267	Wells,Pumps	Alpins Spring 1990 CDBG	Culinary	Source	System	30.00	Yes	Non-Qualifying	1990		19,639	267
268	Wells,Pumps	Dry Creek Well	Culinary	Source	System	30.00	Yes	Non-Qualifying			269,248	268
269	Wells,Pumps	Pumps and Chlorine Equip	Culinary	Source	System	30.00	Yes	Non-Qualifying			9,610	269
270	Wells,Pumps	Dry Creek Well	Culinary	Source	System	30.00	Yes	Non-Qualifying			20,794	270
271	Wells,Pumps	2005 WIP-600 East Well	Culinary	Source	System	30.00	Yes	Non-Qualifying	2005		5,137	271
272	Wells,Pumps	Pilgrims Landing Well & Tank	Culinary	Source	Project	30.00	Yes	Non-Qualifying			1,307,437	272
273	Wells,Pumps	Airport Well	Culinary	Source	Project	30.00	Yes	Non-Qualifying			172,409	273
274	Wells,Pumps	Pilgrims Landing Well & Tank	Culinary	Source	Project	30.00	Yes	Non-Qualifying			63,550	274
275	Wells,Pumps	Airport Well	Culinary	Source	Project	30.00	Yes	Non-Qualifying			87,324	275
276	Wells,Pumps	Spring Creek Well	Culinary	Source	System	30.00	Yes	Non-Qualifying			33,345	276
277	Wells,Pumps	500 West Well	Culinary	Source	System	30.00	Yes	Non-Qualifying			32,920	277
278	Wells,Pumps	Traverse Well Pump/Control	Culinary	Source	Project	30.00	Yes	Non-Qualifying			7,945	278
279	Wells,Pumps	12 East Booster Pump	Culinary	Source	System	30.00	Yes	Non-Qualifying			6,075	279
280	Wells,Pumps	500 West Well	Culinary	Source	System	30.00	Yes	Non-Qualifying			376,118	280
											47,229,547	
	A	B	C		D	E	F	G	H	I	J	

APPENDIX F: HISTORIC CITY ASSET DATA

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE F.1: PRODUCTION/ TREATMENT

CULINARY PRODUCTION/ TREATMENT							
	Capacity (gpm)	Existing Use (gpm)	10-Year Use (gpm)	Buildout Use (gpm)	Percent to Existing	Percent to 10-Year Growth	Percent to Buildout
Sandpit Well	1,300	1,288	5	7	99.1%	0.4%	0.5%
CWP Connection	930	-	554	376	0.0%	59.6%	40.4%
CWP Gardner/Holbrook	2,355	-	831	1,524	0.0%	35.3%	64.7%
CULINARY SOURCE	**4,585**	**1,288**	**1,390**	**1,907**	**99.1%**	**0.39%**	**0.5%**

TABLE F.2: STORAGE

CULINARY STORAGE							
	Existing Capacity (gallons)	Existing Use (gallons)	10-Year Use (gallons)	Buildout Use (gallons)	Percent Used by Existing	Percent Available to 10-Year Growth	Percent to Buildout
Existing Storage	8,920,000	7,139,520	493,995	1,286,485	80.04%	5.54%	14.42%
Overall:	**8,920,000**	**7,139,520**	**493,995**	**1,286,485**	**80.04%**	**5.54%**	**14.42%**

TABLE F.3: TRANSMISSION/PUMPING

CULINARY TRANSMISSION/PUMPING							
	Existing Capacity (gpm)	Existing Peak Day Demand (gpm)	10-Year Peak Day Demand (gpm)	Buildout Peak Day Demand (gpm)	Percent Used by Existing	Percent Available to 10-Year Growth	Percent to Buildout
Total					57.0%	6.1%	36.9%
Overall:	**-**	**-**	**-**	**-**	**57.0%**	**6.1%**	**36.9%**

TABLE F.4: SUMMARY OF BUY-IN PROJECTS

CULINARY PRODUCTION/ TREATMENT					
Asset	**Asset Cost**	**% Existing**	**% 10 Year**	**% Beyond**	**Total**
Production/Treatment Assets	$ 2,457,898	$ 2,435,210	$ 9,643	$ 13,046	$ 2,457,898
Total Culinary Production	**$ 2,457,898**	**$ 2,435,210**	**$ 9,643**	**$ 13,046**	**$ 2,457,898**
CULINARY STORAGE					
	Asset Cost	**% Existing**	**% 10 Year**	**% Beyond**	**Total**
Existing Storage	$ 5,450,118	$ 4,362,245	$ 301,831	$ 786,042	$ 5,450,118
Total Culinary Storage	**$ 5,450,118**	**$ 4,362,245**	**$ 301,831**	**$ 786,042**	**$ 5,450,118**
CULINARY TRANSMISSION/PUMPING					
	Asset Cost	**% Existing**	**% 10 Year**	**% Beyond**	**Total**
Total	$ 13,704,670	$ 7,811,662	$ 835,985	$ 5,057,023	$ 13,704,670
Total Culinary Transmission	**$ 13,704,670**	**$ 7,811,662**	**$ 835,985**	**$ 5,057,023**	**$ 13,704,670**
System Totals	**$ 21,612,686**	**$ 14,609,116**	**$ 1,147,458**	**$ 5,856,111**	**$ 21,612,686**

APPENDIX G: FUTURE CULINARY WATER DEBT

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE G.1: PROPOSED SERIES 2018 DEBT

Year	Series 2018 Water/ PI Revenue Bonds, $4M to Culinary Water		
	Principal	Interest	Fiscal
2018	$ -	$ -	$ -
2019	144,344	142,870	287,214
2020	149,396	137,818	287,214
2021	154,625	132,589	287,214
2022	160,037	127,177	287,214
2023	165,638	121,576	287,214
2024	171,435	115,779	287,214
2025	177,436	109,778	287,214
2028	196,726	90,488	287,214
2029	203,611	83,603	287,214
2030	210,738	76,476	287,214
2031	218,114	69,100	287,214
2032	225,748	61,466	287,214
2033	233,649	53,565	287,214
2034	241,826	45,388	287,214
2035	250,290	36,924	287,214
2036	259,050	28,163	287,214
2037	268,117	19,097	287,214
2038	277,501	9,713	287,214
2039			
Total Debt Service	**$ 4,082,000**	**$ 1,662,278**	**$ 5,744,278**

TABLE G.2: SERIES 2018 WATER & PI REVENUE BOND - PROJECTS FUNDED 50% TO CULINARY WATER

Series 2018	Total Project Costs	% to Existing / Project Level	% Impact Fee Qualifying - 10 Year	% Impact Fee Qualifying - Beyond 10 Year	Totals
West Side 1 (2.3 MG)	$ 2,271,000	0.00%	32.10%	67.90%	100.00%
600 East Replacement (2.3 MG) - Bond	3,124,000	34.80%	27.70%	37.50%	100.00%
GRAND TOTAL	$ 5,395,000	$ 1,087,152	$ 1,594,339	$ 2,713,509	$ 5,395,000

TABLE G.3: SERIES 2018 WATER & PI REVENUE BOND - ALLOCATION OF INTEREST AND COST OF ISSUANCE

Series 2018	Bond Interest	$ to Existing / Project Level	$ Impact Fee Qualifying - 10 Year	$ Impact Fee Qualifying - Beyond 10 Year	Totals
West Side 1 (2.3 MG)	$ 734,246	$ -	$ 235,693	$ 498,553	$ 734,246
600 East Replacement (2.3 MG) - Bond	1,010,033	351,491	279,779	378,762	1,010,033
GRAND TOTAL	**$ 1,744,278**	**$ 351,491**	**$ 515,472**	**$ 877,315**	**$ 1,744,278**

Appendix H: Culinary Water Non-Qualifying Facility Credit

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE H.1: IMPACT FEE CALCULATION

Year	Rate of Growth	ERU	Non-Qualifying Future Capital Projects	Rate Reserves for Non-Qualifying Projects	Debt Service Credit	Net Credit Expense	Total Cost to Existing	Annual Cost per ERU
2015			$ -	$ -	$ -	$ -	**$ -**	$ -
2016		17,849	-	-	-	-	**-**	-
2017	3.18%	18,417	-	-	-	-	**-**	-
2018	3.08%	18,984	1,181,202	-	-	1,181,202	**1,181,202**	62.22
2019	2.99%	19,552	812,384	(1,087,152)	-	(274,768)	**(274,768)**	(14.05)
2020	2.90%	20,119	-	-	-	-	**-**	-
2021	2.82%	20,686	-	-	-	-	**-**	-
2022	2.74%	21,254	188,518	-	-	188,518	**188,518**	8.87
2023	2.67%	21,821	2,090	-	-	2,090	**2,090**	0.10
2024	2.60%	22,388	1,488	-	-	1,488	**1,488**	0.07
2025	2.53%	22,956	-	-	-	-	**-**	-
2026	2.47%	23,523	-	-	-	-	**-**	-
2027	2.40%	24,087	-	-	-	-	**-**	-
2028	2.34%	24,651	-	-	-	-	**-**	-
2029	2.29%	25,215	-	-	-	-	**-**	-
2030	2.24%	25,779	-	-	-	-	**-**	-
2031	2.19%	26,343	-	-	-	-	**-**	-
2032	2.14%	26,907	-	-	-	-	**-**	-
2033	2.10%	27,471	-	-	-	-	**-**	-
2034	2.05%	28,035	-	-	-	-	**-**	-
2035	2.01%	28,599	-	-	-	-	**-**	-
2036	1.97%	29,163	-	-	-	-	**-**	-
2037	1.93%	29,727	-	-	-	-	**-**	-
2038	1.90%	30,291	-	-	-	-	**-**	-
2039	1.86%	30,855	-	-	-	-	**-**	-
2040	1.83%	31,419	-	-	-	-	**-**	-
			$ 2,185,682	**$ (1,087,152)**	**$ -**	**$ 1,098,530**	**$ 1,098,530**	**$ 57.20**

APPENDIX I: CULINARY WATER CALCULATION OF THE IMPACT FEE PER ERU

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE I.1: IMPACT FEE CALCULATION

	Component	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (ERU)	Cost per ERU
2	**CULINARY PRODUCTION/ TREATMENT**					
3	Future 10 Year Capital Projects	$ 2,369,000	42.20%	$ 999,718	5,674	$ 176
4	Future Production Related Debt to be Issued - INTEREST ONLY	-	0.00%	-	5,674	-
5	Existing Production - Sandpit	2,457,898	0.39%	9,643	5,674	2
6	Existing Production- CWP Gardner and Holbrook	1,533,600	35.29%	541,156	5,674	95
7	Existing Production Related Debt - INTEREST ONLY	-	0.00%	-	5,674	-
8	**Production/Treatment Subtotal**	**$ 6,360,498**		**$ 1,550,516**		**$ 273.27**
9						
10						
11	**CULINARY STORAGE**					
12	Future 10 Year Capital Projects	$ 10,422,000	26.86%	$ 2,799,702	5,674	$ 493
13	Future Storage Related Debt to be Issued - INTEREST ONLY	1,744,278	29.55%	515,472	5,674	91
14	Existing Storage Projects	5,450,118	5.54%	301,831	5,674	53
15	Existing Storage Related Debt - OUTSTANDING INTEREST	-	0.00%	-	5,674	-
16						
17	**Storage Subtotal**	**$ 17,616,396**		**$ 3,617,005**		**$ 637.47**
18						
19	**CULINARY TRANSMISSION/PUMPING**					
20	Future 10 Year Capital Projects	$ 8,551,000	12.12%	$ 1,036,199	5,674	$ 183
21	Future Transmission Related Debt to be Issued - INTEREST ONLY	-	0.00%	-	5,674	-
22	Existing Transmission Projects	13,704,670	6.10%	835,985	5,674	147
23	Existing Transmission Related Debt - OUTSTANDING INTEREST	-	0.00%	-	5,674	-
24						
25	**Transmission/Pumping Subtotal**	**$ 22,255,670**		**$ 1,872,184**		**$ 329.96**
26						
27	**Professional Services/ Credits**					
28	Unspent Impact Fee Funds (Excluding Uncommitted Funds)	-	0.00%	$ -	5,674	$ -
29	Credit for Projects Benefitting Existing Users*				5,674	(57.20)
30	Professional Services Expense	60,000	100%	60,000	5,674	11
31	**Professional Services/Credits Subtotal**	**60,000**		**60,000**		**(46.62)**
32						
33	**Total Impact Fee Per ERU**	**$ 46,292,564**		**$ 7,099,705**		**$ 1,194.07**
34	***See Appendix H for credit calculation**					

APPENDIX J: FINAL FEE SCHEDULE

LEHI CITY CULINARY WATER IMPACT FEE ANALYSIS

TABLE J.1: CALCULATION OF CULINARY WATER IMPACT FEE

Unit Type	Fee per ERU	Meter Size	Equivalency Ratio	Impact Fee by Meter Size
Residential	$ 1,194.07	per dwelling unit	1.00	**$ 1,194.07**
Non-Residential/ Multi-Family Residential		3/4"	1.00	**1,194.07**
		1"	2.67	**3,184.19**
		1 1/2"	3.33	**3,980.23**
		2"	10.67	**12,736.75**
		3"	23.33	**27,861.64**
		4"	42.00	**50,150.95**
		6"	93.33	**111,446.56**
		8"	160.00	**191,051.25**

Table J.2: Culinary Water Connection Fee by Meter Size

Non-Standard Users Impact Fee Formula
Step 1: Identify Estimated Average Annual Demand (Gallons) of Proposed Development
Step 2: Multiply Average Annual Demand by Impact Fee per Gallon of $0.013