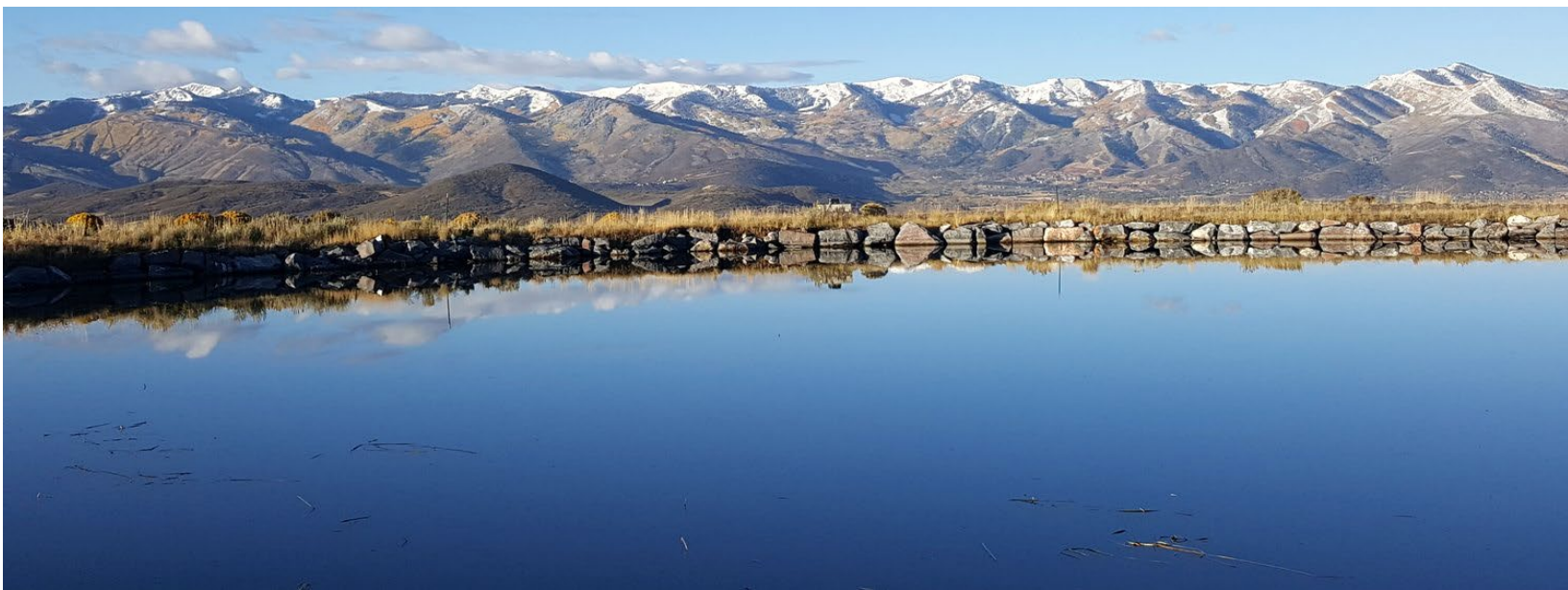


Mountain Regional Water District



2019 Water Impact Fee Analysis



MOUNTAIN REGIONAL WATER
SPECIAL SERVICE DISTRICT



Zions Public Finance, Inc.
October 2019

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EXECUTIVE SUMMARY

Mountain Regional Water District (the District) recently commissioned Zions Public Finance, Inc. (Zions) to calculate the District's culinary water impact fees in accordance with Utah State Law. An impact fee is a payment of money imposed upon new development activity to mitigate the impact of the new development on public infrastructure. In conjunction with this project, the District prepared the Water Impact Fee Facilities Plan (IFFP) dated October 2019.

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

Water System Overview

Level of Service – Equivalent Residential Connection

Level of service (LOS) defines the culinary water demands that a typical residential user, expressed as an Equivalent Residential Connection (ERC), will require and should pay for with impact fees. 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 the LOS to cure an existing deficiency, but projects that fix deficiencies must be paid for through non-impact fee revenues and a credit must be provided to the impact fee payer. In this analysis, a credit has been calculated to offset the portion of the outstanding bonds that are benefitting existing users.

LOS is a term used to describe an Equivalent Residential Connection's (ERC) impact on the core elements of a water district including Water Rights, Source, Storage and Distribution. Based on water usage data from 2016-2018, the calculated LOS is as follows:

TABLE 1: LEVEL OF SERVICE SUMMARY

Level of Service Element	Standard	Unit per ERC
Water Right	0.50	Acre-Feet
Water Source	0.79	GPM
Water Storage	1,000	Gallons
Water Distribution	1.58	GPM

Mountain Regional Water District 2019 Impact Fee Facilities Plan, p. 5.

A single-family residential unit is equated to one ERC; townhomes, condominiums, multi-family and non-residential properties are converted to number of ERCs as discussed later in this analysis.

In 2019 the District serves 4,245 ERCs¹ and is anticipated to grow to approximately 5,485 ERCs by 2029, for an increase of 1,240 ERCs over the 10-year period.

¹ *Mountain Regional Water District 2019 Impact Fee Facilities Plan, p. 17.*

Water Service Area

There are two distinct service areas described in this study - the General Service Area (includes all of the MRW Service Area except Promontory) and the Promontory Service Area.

Water Capital Facilities

Capital facilities necessitated by new development are identified in the District's IFFP as follows:

TABLE 2: CAPITAL FACILITY NEEDS DUE TO NEW GROWTH

Summary of Costs	MRW Service Area	General Service and Promontory	General Service Area Only
Water Rights			
Buy-In	\$6,229,644	\$0	\$6,229,644
New Construction	\$0	\$0	\$0
Water Source			
Buy-In	\$1,186,223	\$643,246	\$542,977
New Construction	\$520,472	\$0	\$520,472
Water Storage			
Buy-In	\$1,257,870	\$796,393	\$461,477
New Construction	\$490,305	\$0	\$490,305
Water Distribution			
Buy-In	\$2,298,304	\$84,297	\$2,214,007
New Construction	\$562,017	\$4,100	\$557,917
TOTAL	\$12,544,834	\$1,528,035	\$11,016,799

The District has already set aside some funds (\$1,888,076.63) to pay for the water rights costs of \$6,229,644.

Culinary Water Impact Fee Calculation

The impact fee calculation is shown in the table below.

TABLE 3: PROPORTIONATE SHARE ANALYSIS – CAPACITY COSTS

Summary of Costs	COSTS		ERCs		FEES	
	General Service Area Only	GS and Promontory	General Service Area	GS and Promontory	General Service Area	GS and Promontory
Water Rights						
Buy-In + Funds Available	\$4,341,567		909	1,240	\$4,774	\$0
New Construction	\$0		909	1,240	\$0	\$0
Water Source						
Buy-In	\$542,977	\$643,246	907	1,240	\$599	\$519
New Construction	\$520,472		907	1,240	\$574	\$0
Water Storage						
Buy-In	\$461,477	\$796,393	916	1,240	\$504	\$642

Summary of Costs	COSTS		ERCs		FEES	
	General Service Area Only	GS and Promontory	General Service Area	GS and Promontory	General Service Area	GS and Promontory
New Construction	\$490,305		916	1,240	\$535	\$0
Water Distribution						
Buy-In	\$2,214,007	\$84,297	916	1,240	\$2,417	\$68
New Construction	\$557,917	\$4,100	916	maximum 1,240	\$609	\$3
TOTAL	\$9,128,722				\$10,012	\$1,232

In addition, consultant costs can be added to the capacity fees calculated above. The maximum fee for Promontory is \$1,242.92. The maximum gross fee for the General Service Area is \$11,254.58.²

TABLE 4: PROPORTIONATE SHARE ANALYSIS – GROSS FEE

GROSS FEE Summary	General Service Area	Promontory
Capacity Costs	\$11,243.94	\$1,232.29
Consultant Costs	\$10.64	\$10.64
TOTAL Gross Fee	\$11,254.58	\$1,242.92

Credits Against Impact Fees

Because some of the projects are needed to serve the needs of existing development, as well as future development, a portion of the costs cannot be included in impact fees. New development cannot be expected to pay the full impact fees and then also contribute to this existing deficiency in the system. Therefore, credits for the General Service Area have been made for the portion of outstanding bonds, as well as a potential new bond, that will benefit existing development.

TABLE 5: CREDITS FOR PROJECTS BENEFITTING EXISTING DEVELOPMENT PER ERC

Summary of Bond Credits	Series 2011A	Series 2011B	Series 2012	Series 2014	Future Bond	Total Credits	Maximum Impact Fee
2020	\$69.50	\$106.65	\$2,715.03	\$56.17	\$188.36	\$3,135.72	\$8,118.86
2021	\$63.67	\$98.33	\$2,509.41	\$51.61	\$177.26	\$2,900.28	\$8,354.30
2022	\$58.03	\$89.90	\$2,313.74	\$47.21	\$166.71	\$2,675.58	\$8,579.00
2023	\$52.34	\$82.25	\$2,126.72	\$43.08	\$156.55	\$2,460.94	\$8,793.64
2024	\$47.01	\$74.30	\$1,942.87	\$38.92	\$146.70	\$2,249.80	\$9,004.78
2025	\$41.56	\$66.96	\$1,763.48	\$34.91	\$137.11	\$2,044.02	\$9,210.56
2026	\$36.43	\$59.31	\$1,587.71	\$31.00	\$127.75	\$1,842.20	\$9,412.38
2027	\$31.18	\$52.21	\$1,415.07	\$27.09	\$118.61	\$1,644.16	\$9,610.42
2028	\$26.27	\$44.90	\$1,247.42	\$23.32	\$109.60	\$1,451.50	\$9,803.08
2029	\$21.23	\$37.87	\$1,077.53	\$19.52	\$100.50	\$1,256.64	\$9,997.94
2030	\$15.92	\$30.34	\$904.64	\$15.58	\$91.30	\$1,057.78	\$10,196.80

² Includes the cost of \$10,011.66 for the General Service Area Only, plus the costs for the Promontory and General Service Area of \$1,232.29, plus consultant costs of \$10.64 per ERC.

Summary of Bond Credits	Series 2011A	Series 2011B	Series 2012	Series 2014	Future Bond	Total Credits	Maximum Impact Fee
2031	\$10.74	\$23.08	\$728.86	\$9.48	\$81.99	\$854.14	\$10,400.44
2032		\$15.31	\$550.65	\$7.64	\$72.56	\$646.16	\$10,608.42
2033			\$370.11	\$5.76	\$63.00	\$438.87	\$10,815.71
2034				\$3.89	\$53.31	\$57.19	\$11,197.39
2035					\$43.46	\$43.46	\$11,211.12
2036					\$33.23	\$33.23	\$11,221.35
2037					\$22.58	\$22.58	\$11,232.00

Application of ERCs

Section 5.0 of the IFFP discusses in detail the methodology and research that are used to define the application of ERCs to specific development types. This information is summarized as follows:

Residential – This is the standard home of 3,000 square feet of living space and less, and represents most of the customers served, and is defined as the standard unit of 1.0 ERC.

Condominiums and Town Homes – These are considered similar and are smaller homes (less than 1,700 square feet of living space), which have attached walls and share a common irrigated area, which acreage is typically small when related to each unit. These are defined as 0.75 ERC units and water fees are assessed at such multiplier relative to the standard ERC.

Large Residential – These homes account for most of the larger homes in more “up-scale” neighborhoods of the District. These are defined as homes above the 3,000 square foot living space and are assessed based on a linear formula, relative to the standard ERC.

The impact on the annual supply requirement (in gallons) of a home will be calculated using the livable area in square feet, multiplied by 47 and adding 37,000. This value will then be divided by the standard annual ERC Level of Service to arrive at an ERC multiplier (i.e. 1.8). All other impact fee elements will then be derived using this same calculated multiplier. This calculation is necessary due to the increased peak loads on sources and additional irrigation demands imposed upon the water system infrastructure by progressively larger homes, as seen in historical water use data as demonstrated in the IFFP (pp. 36-37).

Non-Standard Demand Adjustments

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

CHAPTER 1: OVERVIEW OF THE WATER IMPACT FEES

Summary

An impact fee is intended to recover the District's costs of building excess culinary water capacity to serve future residential or non-residential development rather than passing these growth-related costs on to existing users through rates.

The Utah Impact Fees Act allows only certain costs to be included in an impact fee so that only the fair cost of expansionary projects or existing unused capacity paid by the District is assessed through an impact fee. Eligible costs include future projects, historic costs of existing assets that still have capacity available to serve growth, future or outstanding debt related to these eligible projects, and certain professional expenses related to planning for growth. Project improvements that only serve a specific development or subdivision cannot be included. System improvements that cure a deficiency or enhance the LOS cannot be included without an appropriate credit.

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

Costs to be Included in the Impact Fee

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

- New capital infrastructure for source, storage, and distribution that will serve new development; and
- Professional and planning expenses related to the construction of system improvements that will serve new development.

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

- Projects that cure system deficiencies for existing users;
- Projects that increase the LOS above that which is currently provided;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the District does not have to repay;
- Interest costs related to outstanding or future bonds that have been issued to fund non-impact fee eligible projects such as repair and replacement and curing deficiency; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

Assessment of an Impact Fee

The District 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 fee will be determined by the ERCs calculated for a specific development or according to a non-standard water impact fee calculation if certain water demand data is provided according to District policy. Remodels and expansions of existing facilities will also need to pay an impact fee if the culinary water ERCs are increased but will only pay the difference in the fee for the new ERCs minus the existing ERCs.

Utah Code Legal Requirements

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

Notice of Intent to Prepare Impact Fee Analysis

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

Preparation of Impact Fee Analysis

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

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

- (1) An impact fee analysis shall:
 - (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
 - (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
 - (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
 - (d) estimate the proportionate share of:
 - (i) the costs for existing capacity that will be recouped; and
 - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
 - (e) identify how the impact fee was calculated.
- (2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:
 - (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
 - (b) the cost of system improvements for each public facility;

- (c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;
- (d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;
- (e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;
- (f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;
- (g) extraordinary costs, if any, in servicing the newly-developed properties; and
- (h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Certification of Impact Fee Analysis

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

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

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

Culinary Water Service Area

There are two service areas within the Mountain Regional Water District for the purpose of calculating impact fees: Promontory Service Area and the General Service Area which includes all of the Mountain Regional Water District except for Promontory. Promontory has constructed many of its water capital facilities directly and therefore many of the capital facilities planned by the District will only benefit the General Service Area. Development that takes place in Promontory can only be charged for the projects that benefit that service area.

Proposed Culinary Demands

The table below shows culinary water demand projections. The District's culinary water system currently serves 4,245 ERCs which will grow to an estimated 6,418 ERCs by 2040. Throughout this impact fee analysis, a 10-year growth window will be the basis for the impact fee calculation. The ten-year growth between 2019 and 2029 is expected to be 1,240 ERCs. There must be a balance between the costs of the facilities that will meet the ten-year demand and the number of ERCs that will be added within the ten years to correctly calculate an impact fee. The IFFP has identified the existing and future water projects and calculated the percentage of each project's capacity that will be used to meet the demands of new development.

TABLE 6: GROWTH IN WATER DEMAND

Year	ERC's	Estimated ERC Population Equivalent	Peak Gallons per Day / ERC (GPD)	Annual Ac-Ft per ERC	Total Peak Day Demand (MGD)
2019	4,245	11,971	841	0.47	3.568
2020	4,369	12,321	841	0.47	3.673
2021	4,493	12,670	841	0.47	3.777
2022	4,617	13,020	841	0.47	3.881
2023	4,741	13,370	841	0.47	3.985
2024	4,865	13,719	841	0.47	4.090
2025	4,989	14,069	841	0.47	4.194
2026	5,113	14,419	841	0.47	4.298
2027	5,237	14,768	841	0.47	4.402
2028	5,361	15,118	841	0.47	4.507
2029	5,485	15,468	841	0.47	4.611
2030	5,609	15,817	841	0.47	4.715
2031	5,733	16,167	841	0.47	4.819
2032	5,857	16,517	841	0.47	4.924
2033	5,939	16,748	841	0.47	4.992
2034	6,022	16,982	841	0.47	5.062
2035	6,106	17,220	841	0.47	5.133
2036	6,168	17,392	841	0.47	5.185
2037	6,229	17,566	841	0.47	5.236
2038	6,291	17,742	841	0.47	5.289
2039	6,354	17,919	841	0.47	5.342

Year	ERC's	Estimated ERC Population Equivalent	Peak Gallons per Day / ERC (GPD)	Annual Ac-Ft per ERC	Total Peak Day Demand (MGD)
2040	6,418	18,099	841	0.47	5.395

Existing and Proposed LOS Analysis

Level of Service (LOS) defines how much of the culinary water system a typical residential user, defined as an Equivalent Residential Connection (ERC), will require and can fairly fund through impact fee revenue. LOS is based upon historic observed water demands per ERC. 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 LOS to cure an existing deficiency, but projects that fix deficiencies must be paid for by non-impact fee revenues and a credit must be provided to the impact fee payer. In this analysis, a credit has been calculated to offset the portion of the future capital projects which will benefit existing users.

LOS is calculated in terms of average demand and peak day demand. In the District, the LOS per ERC is equated to the following:

TABLE 7: SERVICE LEVELS

Level of Service Element	Standard	Unit per ERC
Water Right	0.50	Acre-Feet
Water Source	0.79	GPM
Water Storage	1,000	Gallons
Water Distribution	1.58	GPM

Mountain Regional Water District 2019 Impact Fee Facilities Plan, p. 5.

A single-family residential unit is equated to one ERC, but townhomes, condominiums, multi-family and non-residential properties can be converted to the equivalent number of ERCs using the conversion data shown later in this document.

Water Rights LOS

These are the legal water rights necessary to provide for the annual water consumption per ERC. The LOS has been set at 0.50 acre feet per year per ERC based on historic water usage as well as a 10 percent safety factor.

Source Capacity LOS

Culinary water sources must be sufficient to meet demand and account for limitations in supply such as changes in seasonal supply or the effects of dry years. The water source LOS is 0.79 GPM.

Storage LOS

Storage is an equalizing component in the water system that allows sources and boosters to operate at a set peak day rate while absorbing fluctuations in demand within each pressure zone. In addition to providing operational equalization, storage must also provide fire flow storage, and emergency or standby storage.

The volume of required storage for indoor and outdoor use was addressed in the IFFP. In accordance with {R309-510-8(w) U.A.C} 1,000 gallons of storage are required for each ERC. This includes fire storage.

Distribution Capacity LOS

Distribution pipelines must be sized and designed to deliver a peak instantaneous quantity of culinary water as well as meet fire flow demands. The proposed LOS for distribution from a system design perspective is at least 1.58 gpm per ERC.

CHAPTER 3: IMPACT ON CAPACITY FROM DEVELOPMENT ACTIVITY

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

Excess Capacity and Deficiency

The District has the right to increase the established LOS in the future by constructing facilities that will provide greater capacity per ERC, but such LOS increases cannot be funded through impact fees. If the proposed LOS is higher than the existing LOS, then a deficiency exists and will be cured through sources of funding other than impact fees. A credit has been included in the impact fee calculation to offset the cost of constructing infrastructure that cures deficiencies for existing users.

Water Rights

The District does not anticipate acquiring any new water rights. Rather, new development will be required to buy into the existing excess capacity of the outstanding water rights. The water rights below were acquired and funded through the issuance of a bond in 2003.

TABLE 8: WATER RIGHTS EXISTING CAPACITY COSTS

Ref #	EXISTING WATER RIGHTS DESCRIPTIONS	Total Debt Costs	Percent to Existing Demands	Percent to 10-Year Growth	Percent to Growth Beyond 10-Years
R1	Silver Springs Water Rights / 179 af decreed	\$2,452,560	76.9%	19.3%	3.8%
R2	Silver Springs Water Rights / 130 af lease	\$1,649,352	76.9%	19.3%	3.8%
R3	Silver Springs Water Rights / 431 af lease	\$5,466,847	76.9%	19.3%	3.8%
R4	Silver Springs Water Rights / 100 af lease	\$1,267,029	76.9%	19.3%	3.8%
R5	Spring Creek Water Rights / 200 af lease	\$39,925	9.9%	19.3%	70.8%
R6	Spring Creek Water Rights / 355 af decreed	\$70,864	9.9%	19.3%	70.8%
R7	MJM Water Rights / 1091 af lease	\$21,331,368	54.9%	19.3%	25.8%
TOTAL		\$32,277,946			

Water Source

The District has some excess capacity that can serve the needs of new development as shown in the table below.

TABLE 9: WATER SOURCE EXISTING CAPACITY COSTS

Ref #	EXISTING WATER SOURCE DESCRIPTIONS	Total Costs	Percent to Existing Demands	Percent to 10-Year Growth	Percent to Growth Beyond 10-Years
SE13	Lost Canyon	\$7,409,144	91.3%	5.0%	3.7%
SE14	Promontory - Starpointe Well 15B	\$1,795,910	91.3%	5.0%	3.7%
SE15	Nugget Well	\$361,211	83.8%	13.0%	3.2%
SE16	Spring Creek - Gorgoza Well #6	\$683,698	71.8%	13.0%	15.2%
SE17	Spring Creek Well #2R (Blackhawk)	\$282,168	71.8%	13.0%	15.2%
SE18	Bison Bluff Well	\$2,767,251	5.0%	20.0%	75.0%

Ref #	EXISTING WATER SOURCE DESCRIPTIONS	Total Costs	Percent to Existing Demands	Percent to 10-Year Growth	Percent to Growth Beyond 10-Years
TOTAL		\$13,299,382			

Water Storage

The District has some excess storage capacity that can serve the needs of new development as shown in the table below.

TABLE 10: WATER STORAGE EXISTING CAPACITY COSTS

Ref #	EXISTING WATER STORAGE DESCRIPTIONS	Total Costs	Percent to Existing Demands	Percent to 10-Year Growth	Percent to Growth Beyond 10-Years
TE1	Colony White Pine Tank	\$1,093,916	19.7%	40.0%	40.3%
TE2	Silver Springs Mid Mtn Tank	\$197,277	83.8%	10.0%	6.2%
TE3	Blackhawk Tank	\$41,832	71.8%	10.0%	18.2%
TE4	Silver Creek 2MG Reservoir Project	\$3,185,571	0.0%	25.0%	75.0%
TOTAL		\$4,518,596			

Water Distribution

The District has some excess distribution capacity that can serve the needs of new development as shown in the table below.

TABLE 11: WATER DISTRIBUTION EXISTING CAPACITY COSTS

Ref #	EXISTING WATER DISTRIBUTION DESCRIPTIONS	Total Costs	Percent to Existing Demands	Percent to 10-Year Growth	Percent to Growth Beyond 10-Years
DE1	Atkinson Pipeline Under US-40	\$432,264	59.9%	15.0%	25.1%
DE2	Atkinson Pipeline Under US-40	\$162,093	59.9%	15.0%	25.1%
DE3	Colony Transmission Line	\$3,192,790	59.9%	15.0%	25.1%
DE4	Old Ranch Road Transmission Line	\$2,187,833	59.9%	15.0%	25.1%
DE5	Trailside 20" Transmission Line	\$1,446,784	59.9%	15.0%	25.1%
DE6	Willow Springs Transmission Line	\$957,177	59.9%	15.0%	25.1%
DE7	Dairy Booster Pump Station	\$2,242,528	59.9%	15.0%	25.1%
DE8	Gorgoza Pipeline (acquired from Timberline)	\$150,000	59.9%	15.0%	25.1%
DE9	Gorgoza Transmission Line (I-80 Rasmussen)	\$1,367,395	59.9%	15.0%	25.1%
DE10	Summit Park - Interconnect Pipeline	\$971,957	59.9%	15.0%	25.1%
DE11	Summit Park - Crestview Booster	\$132,866	59.9%	15.0%	25.1%
DE12	Summit Park - Kilby Booster	\$186,941	59.9%	15.0%	25.1%
DE13	Promontory to Park City 12" MRW Trans.Line	\$359,780	59.9%	15.0%	25.1%

Ref #	EXISTING WATER DISTRIBUTION DESCRIPTIONS	Total Costs	Percent to Existing Demands	Percent to 10- Year Growth	Percent to Growth Beyond 10- Years
DE14	Lost Canyon - Lost Canyon Raw Water Pipeline	\$2,062,624	91.3%	8.7%	0.0%
DE15	Promontory - Spine Road Extension	\$801,020	100.0%	0.0%	0.0%
DE16	Blackhawk Booster Upgrade	\$107,429	71.8%	15.0%	13.2%
DE17	Blackhawk (Stonehouse) Vault	\$36,472	100.0%	0.0%	0.0%
DE18	Red Hawk Antenna	\$18,941	71.8%	15.0%	13.2%
DE19	Summit Park - Kilby Booster Chlorine Facility	\$6,727	71.8%	15.0%	13.2%
DE20	Equestrian Transmission Line	\$202,198	71.8%	15.0%	13.2%
TOTAL		\$17,025,819			

CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

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

Water Rights

The District does not intend to acquire any new water rights in the next 10 years. The cost to 10-year growth from existing water rights is \$6,229,644.

TABLE 12: EXISTING RIGHTS WITH EXCESS CAPACITY

Ref #	EXISTING WATER RIGHTS DESCRIPTIONS	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
R1	Silver Springs Water Rights / 179 af decreed	\$1,885,933	\$473,344	\$93,283
R2	Silver Springs Water Rights / 130 af lease	\$1,268,294	\$318,325	\$62,733
R3	Silver Springs Water Rights / 431 af lease	\$4,203,815	\$1,055,101	\$207,931
R4	Silver Springs Water Rights / 100 af lease	\$974,301	\$244,537	\$48,191
R5	Spring Creek Water Rights / 200 af lease	\$3,953	\$7,706	\$28,267
R6	Spring Creek Water Rights / 355 af decreed	\$7,016	\$13,677	\$50,172
R7	MJM Water Rights / 1091 af lease	\$11,716,484	\$4,116,954	\$5,497,930
	TOTAL	\$20,059,796	\$6,229,644	\$5,988,507

No new water rights projects are identified as necessary within the next 10 years. There are no separate costs for the General Service Area and the Promontory Service Area.

Water Source

Impact fees for the water source component can be calculated both on buy-in to existing, excess capacity and new construction for projects needed within the next 10 years. The existing, excess capacity cost attributable to 10-year growth is \$1,186,223.

TABLE 13: EXISTING WATER SOURCES WITH EXCESS CAPACITY

Ref #	EXISTING WATER SOURCE DESCRIPTIONS	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
SE13	Lost Canyon	\$6,767,097	\$370,457	\$271,590
SE14	Promontory - Starpointe Well 15B	\$1,640,283	\$89,795	\$65,831
SE15	Nugget Well	\$302,670	\$46,957	\$11,584
SE16	Spring Creek - Gorgoza Well #6	\$491,049	\$88,881	\$103,768
SE17	Spring Creek Well #2R (Blackhawk)	\$202,660	\$36,682	\$42,826
SE18	Bison Bluff Well	\$138,363	\$553,450	\$2,075,439
	TOTAL	\$9,542,122	\$1,186,223	\$2,571,037

The Promontory Service Area is only required to buy into two projects – SE 14 and SE 18, for a total cost of \$643,246 which must be shared between Promontory and the General Service Area.

In addition, the District plans to acquire the following new water source facilities within the next 10 years which must be paid for only by the General Service Area.

TABLE 14: NEW WATER SOURCES NEEDED

Ref #	FUTURE WATER SOURCE DESCRIPTIONS	Est. Completion Year	Total Costs	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
SF1	Share of Regionalization Interconnection Projects	2020	\$1,029,289	\$0	\$0	\$1,029,289
SF2	Future Well No. 17	2024	\$1,727,607	\$0	\$259,141	\$1,468,466
SF3	Pump Capacity Expansion of LCBS	2022	\$365,715	\$0	\$36,571	\$329,143
SF4	Willow Draw Water Treatment Plant	2028	\$2,247,593	\$0	\$224,759	\$2,022,834
TOTAL FUTURE PROJECT COSTS:			\$5,370,203	\$0	\$520,472	\$4,849,731

This results in a total cost of \$1,706,695 over the next ten years (\$1,186,223 for buy-in to existing water source facilities, plus \$520,472 for new facilities).

Water Storage

Impact fees for the water storage component can be calculated both on buy-in to existing, excess capacity and new construction for projects needed within the next 10 years. The existing, excess capacity cost attributable to 10-year growth is \$1,257,870 for the General Service Area.

TABLE 15: WATER STORAGE – BUY-IN TO EXCESS CAPACITY COSTS

Ref #	EXISTING WATER STORAGE DESCRIPTIONS	Total Cash + Debt Costs	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
TE1	Colony White Pine Tank	\$1,093,916	\$215,502	\$437,567	\$440,848
TE2	Silver Springs Mid Mtn Tank	\$197,277	\$165,318	\$19,728	\$12,231
TE3	Blackhawk Tank	\$41,832	\$30,035	\$4,183	\$7,613
TE4	Silver Creek 2MG Reservoir Project	\$3,185,571	\$0	\$796,393	\$2,389,178
TOTAL		\$4,518,596	\$410,855	\$1,257,870	\$2,849,871

Promontory is only required to buy-in to Project TE4, at a cost of \$796,393 which must be paid for by both the General Service Area and Promontory.

In addition, the District plans to acquire the following new water storage facilities within the next 10 years.

TABLE 16: WATER STORAGE – CONSTRUCTION OF NEW PROJECTS

Ref #	FUTURE WATER STORAGE DESCRIPTIONS	Estimated Total Cash + Debt Costs	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
TF1	Summit Park 500 K Gallon Tank	\$1,634,349	\$572,022	\$490,305	\$572,022
TOTAL FUTURE PROJECT COSTS:		\$1,634,349	\$572,022	\$490,305	\$572,022

This results in a total cost of \$1,748,175 (\$1,257,870 for buy-in to excess capacity plus \$490,305 for new construction). Promontory will share in the cost of \$796,393 for project TE4.

Water Distribution

Impact fees for the water distribution component can be calculated both on buy-in to existing, excess capacity and new construction for projects needed within the next 10 years. The existing, excess capacity cost attributable to 10-year growth is \$2,298,304 for the General Service Area.

TABLE 17: WATER DISTRIBUTION – BUY-IN TO EXCESS CAPACITY COSTS

Ref #	EXISTING WATER DISTRIBUTION DESCRIPTIONS	Total Costs	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
DE1	Atkinson Pipeline Under US-40	\$432,264	\$258,719	\$64,840	\$108,705
DE2	Atkinson Pipeline Under US-40	\$162,093	\$97,016	\$24,314	\$40,763
DE3	Colony Transmission Line	\$3,192,790	\$1,910,954	\$478,919	\$802,918
DE4	Old Ranch Road Transmission Line	\$2,187,833	\$1,309,465	\$328,175	\$550,193
DE5	Trailside 20" Transmission Line	\$1,446,784	\$865,931	\$217,018	\$363,835
DE6	Willow Springs Transmission Line	\$957,177	\$572,891	\$143,577	\$240,709
DE7	Dairy Booster Pump Station	\$2,242,528	\$1,342,202	\$336,379	\$563,947
DE8	Gorgoza Pipeline (acquired from Timberline)	\$150,000	\$89,778	\$22,500	\$37,722
DE9	Gorgoza Transmission Line (I-80 Rasmussen)	\$1,367,395	\$818,416	\$205,109	\$343,870
DE10	Summit Park - Interconnect Pipeline	\$971,957	\$581,737	\$145,794	\$244,426
DE11	Summit Park - Crestview Booster	\$132,866	\$79,523	\$19,930	\$33,413
DE12	Summit Park - Kilby Booster	\$186,941	\$111,888	\$28,041	\$47,012
DE13	Promontory to Park City 12" MRW Trans.Line	\$359,780	\$215,336	\$53,967	\$90,477
DE14	Lost Canyon - Lost Canyon Raw Water Pipeline	\$2,062,624	\$1,883,885	\$179,448	(\$709)
DE15	Promontory - Spine Road Extension	\$801,020	\$801,020	\$0	\$0
DE16	Blackhawk Booster Upgrade	\$107,429	\$77,158	\$16,114	\$14,156
DE17	Blackhawk (Stonehouse) Vault	\$36,472	\$36,472	\$0	\$0
DE18	Red Hawk Antenna	\$18,941	\$13,604	\$2,841	\$2,496
DE19	Summit Park - Kilby Booster Chlorine Facility	\$6,727	\$4,832	\$1,009	\$886
DE20	Equestrian Transmission Line	\$202,198	\$145,223	\$30,330	\$26,644
	TOTAL	\$17,025,819	\$11,216,052	\$2,298,304	\$3,511,464

Promontory is only required to buy-in to Projects DE13 and DE20, at a cost of \$84,297 which must be paid for by both the General Service Area and Promontory.

In addition, the District plans to acquire the following new water distribution facilities within the next 10 years.

TABLE 18: WATER DISTRIBUTION – NEW CONSTRUCTION COSTS

Ref #	FUTURE WATER DISTRIBUTION DESCRIPTIONS	Estimated Total Cash + Debt Costs	Cost to Existing Customers	Cost to 10-Year Growth	Costs Beyond 10-Years
DF1	The EPA Pipeline Extension	\$205,000	\$200,900	\$4,100	\$0
DF2	South Point Distribution Line Size Upgrades	\$485,840	\$0	\$97,168	\$388,672
DF3	Willow Creek to Old Ranch Pipeline Connection	\$252,709	\$75,813	\$12,635	\$164,261
DF4	Old Ranch Booster Surge and Pump Upgrades	\$345,831	\$0	\$69,166	\$276,665
DF5	Glenwild Pump Station Capacity Upgrades	\$243,041	\$133,673	\$36,456	\$72,912
DF6	Redhawk Pump Station Capacity Upgrades	\$253,604	\$134,410	\$38,041	\$81,153
DF7	Silver Creek Pipeline Extension	\$1,691,395	\$1,386,944	\$304,451	\$0
	TOTAL FUTURE PROJECT COSTS:	\$3,477,420	\$1,931,739	\$562,017	\$983,663

Promontory is only required to share in the construction of DF1 at a cost of \$4,100.

This results in a total cost of \$2,860,321 (\$2,298,304 for buy-in to excess capacity plus \$562,017 for new construction). Promontory and the General Service Area will share the cost of \$88,397 (\$84,297 for buy-in to excess capacity and \$4,100 for new construction).

Summary of Costs to 10-Year Growth

Total costs for 10-year growth are \$12,544,834 for the General Service Area and \$1,528,035 for the Promontory Service Area.

TABLE 19: SUMMARY OF 10-YEAR WATER COSTS

Summary of Costs	Total Cost	Costs Attributable to Promontory and General Service Area
Water Rights		
Buy-In	\$6,229,644	\$0
New Construction	\$0	\$0
Water Source		
Buy-In	\$1,186,223	\$643,246
New Construction	\$520,472	\$0
Water Storage		
Buy-In	\$1,257,870	\$796,393
New Construction	\$490,305	\$0
Water Distribution		
Buy-In	\$2,298,304	\$84,297
New Construction	\$562,017	\$4,100
TOTAL	\$12,544,834	\$1,528,035

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future and historic cost of existing system improvements that benefit new growth and can be recouped through impact fees. The impact fee for existing assets must be based on the historic costs while the fees for construction of new facilities must be based on reasonable future costs of the system. This chapter will show that the proposed impact fee for system improvements is reasonably related to the impact on the 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 District has funded existing infrastructure with revenue sources including the following:

- Water User Rates and Miscellaneous Fees
- Water Impact Fees

Grant funding is not secured at this time; however, 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 Code Ann. § 11-36a-304(2)(f)). Construction of such facilities must be agreed upon with the District before construction begins.

Maximum Legal Culinary Water Impact Fee per ERC

The maximum impact fee is based on the combination of individual costs for the components of water rights, source, storage, distribution, and allowable professional fees. Each fee for individual components is based upon the costs of qualifying improvements divided by the total and available capacities. The result is a very precise impact fee that complies with the Impact Fees Act.

The following tables show the maximum legal impact fees that the District can assess to each user category according to the calculated ERCs. Single-family residential units are assessed a culinary water impact fee equivalent to one ERC. Non-residential connections, townhomes, condominiums and multi-family connections will be assessed a culinary impact fee based on the calculated ERCs.

TABLE 20: PROPORTIONATE SHARE ANALYSIS – COST PER ERC

Summary of Costs	COSTS		ERCs		FEES per ERC	
	General Service Area	Promontory	General Service Area	Promontory	General Service Area	Promontory and GSA
Water Rights						
Buy-In	\$4,341,567		909	1,240	\$4,774	\$0
New Construction	\$0		909	1,240	\$0	\$0

Summary of Costs	COSTS		ERCs		FEES per ERC	
	General Service Area	Promontory	General Service Area	Promontory	General Service Area	Promontory and GSA
Water Source						
Buy-In	\$542,977	\$643,246	907	1,240	\$599	\$519
New Construction	\$520,472		907	1,240	\$574	\$0
Water Storage						
Buy-In	\$461,477	\$796,393	916	1,240	\$504	\$642
New Construction	\$490,305		916	1,240	\$535	\$0
Water Distribution						
Buy-In	\$2,214,007	\$84,297	916	1,240	\$2,417	\$68
New Construction	\$557,917	\$4,100	916	1,240	\$609	\$3
TOTAL					\$10,011.66	\$1,232.29

The total fee for the General Service Area is calculated by adding the \$10,011.66 and \$1,232.29 for a total of \$11,243.94.

Consultant Fees

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

TABLE 21: PROPORTIONATE SHARE ANALYSIS – CONSULTANT FEES

Consultant Costs	Amount
Total Estimated Consultant Costs	\$13,189
Growth in ERCs, 2019-2028	1,240
Cost per ERC	\$10.64

Summary of Gross Impact Fee

TABLE 22: PROPORTIONATE SHARE ANALYSIS – GROSS FEE

GROSS FEE Summary	General Service Area	Promontory
Capacity Costs	\$11,243.94	\$1,232.29
Consultant Costs	\$10.64	\$10.64
TOTAL Gross Fee	\$11,254.58	\$1,242.92

Credits Against Impact Fees

The District has several bonds outstanding that are paying for infrastructure that benefits existing development. New development cannot be charged the full impact fee and then also be required to pay, through water rates, on the portion of the bonds that benefit existing development. Therefore, a credit needs to be made against the gross impact fee to account for the higher water rates that new development will pay in order to cover the payments on the outstanding bonds. There are four outstanding bonds for which credits need to be made. They are the Series 2003/2012, Series 2011A, Series 2011B and Series 2014.

Series 2012**TABLE 23: SERIES 2003/2012 BENEFITS TO EXISTING CUSTOMERS**

Existing Impact Fee Item	Bond	Bond Costs	Existing Customer Demands	Portion to Existing Customers
Silver Springs Water Rights / 179 af decreed	Series 2003/2012	\$896,800	76.90%	\$689,608
Silver Springs Water Rights / 130 af lease	Series 2003/2012	\$603,100	76.90%	\$463,763
Silver Springs Water Rights / 431 af lease	Series 2003/2012	\$1,999,000	76.90%	\$1,537,161
Silver Springs Water Rights / 100 af lease	Series 2003/2012	\$463,300	76.90%	\$356,262
Spring Creek Water Rights / 200 af lease	Series 2003/2012	\$14,599	9.90%	\$1,445
Spring Creek Water Rights / 355 af decreed	Series 2003/2012	\$25,912	9.90%	\$2,565
MJM Water Rights / 1091 af lease	Series 2003/2012	\$7,800,000	54.93%	\$4,284,234
Lost C. - Property Easements	Series 2003/2012	\$47,448	91.30%	\$43,320
Lost C. - Peoa Well Field	Series 2003/2012	\$90,833	91.30%	\$82,931
Lost C. - 8" Culinary Well	Series 2003/2012	\$86,637	91.30%	\$79,100
Lost C. - Lost Canyon Booster Station	Series 2003/2012	\$380,342	91.30%	\$347,252
Lost C. - Treatment Plant	Series 2003/2012	\$785,590	91.30%	\$717,244
Lost C. - Treatment Plant Expansion (Initial)	Series 2003/2012	\$400,000	91.30%	\$365,200
Promontory - Starpointe Well 15B	Series 2003/2012	\$649,013	91.33%	\$592,772
Nugget Well	Series 2003/2012	\$132,080	83.79%	\$110,674
Colony White Pine Tank	Series 2003/2012	\$400,000	19.70%	\$78,800
Silver Springs Mid Mtn Tank	Series 2003/2012	\$72,136	83.80%	\$60,450
Atkinson Pipeline Under US-40	Series 2003/2012	\$158,061	59.85%	\$94,603
Colony Transmission Line	Series 2003/2012	\$683,988	59.85%	\$409,382
Old Ranch Road Transmission Line	Series 2003/2012	\$800,000	59.85%	\$478,817
Trailside 20" Transmission Line	Series 2003/2012	\$529,029	59.85%	\$316,635

Existing Impact Fee Item	Bond	Bond Costs	Existing Customer Demands	Portion to Existing Customers
Willow Springs Transmission Line	Series 2003/2012	\$350,000	59.85%	\$209,483
Dairy Booster Pump Station	Series 2003/2012	\$820,000	59.85%	\$490,788
Gorgoza Transmission Line (I-80 Rasmussen)	Series 2003/2012	\$500,000	59.85%	\$299,261
Summit Park - Interconnect Pipeline	Series 2003/2012	\$275,233	59.85%	\$164,733
Lost Canyon - Lost Canyon Raw Water Pipeline	Series 2003/2012	\$733,628	91.33%	\$670,055
Promontory - Spine Road Extension	Series 2003/2012	\$292,900	100.00%	\$292,900
TOTAL	Series 2003/2012			\$13,239,436

Credits are made for the \$13,239,436 of outstanding bond payments that will be used to pay for infrastructure for existing development. These credits are calculated by taking the percentage of bond payments attributable to new development, dividing by the total ERCs in that year (i.e., the number of ERCs that will be making bond payments) and then calculating the net present value of the remaining bond payments.

TABLE 24: SERIES 2003/2012 CREDIT CALCULATION

Series 2012	Principal	Interest	Total Payment	ERUs	Credit per ERU	NPV* of Outstanding Bond Credit
2020	\$1,410,000	1,053,200.00	\$2,463,200	5,226	\$287.37	\$2,715.03
2021	\$1,465,000	996,800.00	\$2,461,800	5,518	\$272.01	\$2,509.41
2022	\$1,520,000	938,200.00	\$2,458,200	5,790	\$258.85	\$2,313.74
2023	\$1,585,000	877,400.00	\$2,462,400	6,042	\$248.48	\$2,126.72
2024	\$1,645,000	814,000.00	\$2,459,000	6,300	\$237.97	\$1,942.87
2025	\$1,710,000	748,200.00	\$2,458,200	6,563	\$228.36	\$1,763.48
2026	\$1,780,000	679,800.00	\$2,459,800	6,831	\$219.54	\$1,587.71
2027	\$1,850,000	608,600.00	\$2,458,600	7,080	\$211.72	\$1,415.07
2028	\$1,925,000	534,600.00	\$2,459,600	7,222	\$207.65	\$1,247.42
2029	\$2,005,000	457,600.00	\$2,462,600	7,366	\$203.83	\$1,077.53
2030	\$2,085,000	377,400.00	\$2,462,400	7,513	\$199.82	\$904.64
2031	\$2,155,000	304,425.00	\$2,459,425	7,664	\$195.66	\$728.86
2032	\$2,230,000	229,000.00	\$2,459,000	7,817	\$191.79	\$550.65
2033	\$2,350,000	117,500.00	\$2,467,500	7,973	\$188.68	\$370.11
	\$21,715,171	8,736,725.00				
Existing Customer Portion	\$13,239,436					
% to Existing Customers	60.97%					
*NPV = net present value discounted at a rate of 4.0 percent						

This same procedure is followed for the other three outstanding bonds as shown below.

Series 2011A**TABLE 25: SERIES 2011 A BOND PORTION BENEFITTING EXISTING CUSTOMERS**

Existing Impact Fee Item	Bond Costs	Existing Customer Demands	Portion to Existing Customers
Lost C. - Pretreatment (Post Treatment) Building	\$258,102	91.30%	\$235,647
Lost C. - Pre & Post Treatment Equipment	\$241,898	91.30%	\$220,853
TOTAL			\$456,500

TABLE 26: SERIES 2011A CREDIT CALCULATION

Year	Principal	Interest	Total Payment	ERUs	Credit per ERU	NPV of Outstanding Bond Credit
2020	\$36,000	\$7,220	\$43,220	5,226	\$7.95	\$69.50
2021	\$37,000	\$6,673	\$43,673	5,518	\$7.61	\$63.67
2022	\$38,000	\$6,110	\$44,110	5,790	\$7.32	\$58.03
2023	\$38,000	\$5,533	\$43,533	6,042	\$6.92	\$52.34
2024	\$39,000	\$4,955	\$43,955	6,300	\$6.71	\$47.01
2025	\$39,000	\$4,362	\$43,362	6,563	\$6.35	\$41.56
2026	\$40,000	\$3,770	\$43,770	6,831	\$6.16	\$36.43
2027	\$40,000	\$3,162	\$43,162	7,080	\$5.86	\$31.18
2028	\$41,000	\$2,554	\$43,554	7,222	\$5.80	\$26.27
2029	\$42,000	\$1,930	\$43,930	7,366	\$5.73	\$21.23
2030	\$42,000	\$1,292	\$43,292	7,513	\$5.54	\$15.92
2031	\$43,000	\$654	\$43,654	7,664	\$5.47	\$10.74
Total Remaining Bond	\$475,000	\$48,215				
Total Benefitting Existing Customers	\$456,500					
% of Remaining Bond Benefitting Existing Customers	96.1%					

Series 2011B**TABLE 27: SERIES 2011 B BOND PORTION BENEFITTING EXISTING CUSTOMERS**

Existing Impact Fee Item	Bond	Bond Costs	Existing Customer Demands	Portion to Existing Customers
Lost C. - Plant Expansion of 2013 (Green Proj.)	Series 2011B	875,000	91.30%	798,875

TABLE 28: SERIES 2011 B BOND CREDIT CALCULATION

Year	Principal	Interest	Total Payment	ERUs	Credit per ERU	NPV of Outstanding Bond Credit
2020	\$65,000	0.00%	\$65,000	5,226	\$11.68	\$106.65
2021	\$66,000	0.00%	\$66,000	5,518	\$11.23	\$98.33
2022	\$65,000	0.00%	\$65,000	5,790	\$10.54	\$89.90
2023	\$66,000	0.00%	\$66,000	6,042	\$10.25	\$82.25
2024	\$65,000	0.00%	\$65,000	6,300	\$9.69	\$74.30
2025	\$66,000	0.00%	\$66,000	6,563	\$9.44	\$66.96
2026	\$65,000	0.00%	\$65,000	6,831	\$8.93	\$59.31
2027	\$66,000	0.00%	\$66,000	7,080	\$8.75	\$52.21
2028	\$65,000	0.00%	\$65,000	7,222	\$8.45	\$44.90
2029	\$66,000	0.00%	\$66,000	7,366	\$8.41	\$37.87
2030	\$65,000	0.00%	\$65,000	7,513	\$8.12	\$30.34
2031	\$66,000	0.00%	\$66,000	7,664	\$8.08	\$23.08
2032	\$65,000	0.00%	\$65,000	7,817	\$7.81	\$15.31
Total Remaining Bond	\$851,000	0.00%				
Total Benefitting Existing Customers	\$798,875					
% of Remaining Bond Benefitting Existing Customers	93.9%					

Series 2014B

TABLE 29: SERIES 2014B BOND CREDIT CALCULATION

Year	Principal	Interest	Total Payment	ERUs	Credit per ERU	NPV of Outstanding Bond Credit
2020	\$465,000	\$299,563.00	\$764,563	5,226	\$6.24	\$56.17
2021	\$475,000	\$290,262.00	\$765,262	5,518	\$5.91	\$51.61
2022	\$485,000	\$276,013.00	\$761,013	5,790	\$5.60	\$47.21
2023	\$505,000	\$261,462.00	\$766,462	6,042	\$5.41	\$43.08
2024	\$520,000	\$241,263.00	\$761,263	6,300	\$5.15	\$38.92
2025	\$540,000	\$220,463.00	\$760,463	6,563	\$4.94	\$34.91
2026	\$565,000	\$198,862.00	\$763,862	6,831	\$4.77	\$31.00
2027	\$585,000	\$176,263.00	\$761,263	7,080	\$4.58	\$27.09

Year	Principal	Interest	Total Payment	ERUs	Credit per ERU	NPV of Outstanding Bond Credit
2028	\$610,000	\$151,400.00	\$761,400	7,222	\$4.49	\$23.32
2029	\$640,000	\$125,475.00	\$765,475	7,366	\$4.43	\$19.52
2030	\$665,000	\$96,675.00	\$761,675	7,513	\$4.32	\$15.58
2031	\$310,000	\$66,750.00	\$376,750	7,664	\$2.10	\$9.48
2032	\$325,000	\$51,250.00	\$376,250	7,817	\$2.05	\$7.64
2033	\$340,000	\$35,000.00	\$375,000	7,973	\$2.00	\$5.76
2034	\$360,000	\$18,000.00	\$378,000	8,133	\$1.98	\$3.89
Total Remaining Bond	\$7,390,000					
Total Benefitting Existing Customers	\$187,030					
% of Remaining Bond Benefitting Existing Customers	4.3%					

The following table summarizes the bond credits that must be made against the gross impact fee so that new development is not charged twice. The total credits are subtracted from the gross impact fee of \$11,254.58 in order to arrive at the maximum impact fee that may be charged each year.

TABLE 30: SUMMARY OF BOND CREDITS AND MAXIMUM FEE

Summary of Bond Credits	Series 2011A	Series 2011B	Series 2012	Series 2014	Future Bond	Total Credits	Maximum Impact Fee
2020	\$69.50	\$106.65	\$2,715.03	\$56.17	\$188.36	\$3,135.72	\$8,118.86
2021	\$63.67	\$98.33	\$2,509.41	\$51.61	\$177.26	\$2,900.28	\$8,354.30
2022	\$58.03	\$89.90	\$2,313.74	\$47.21	\$166.71	\$2,675.58	\$8,579.00
2023	\$52.34	\$82.25	\$2,126.72	\$43.08	\$156.55	\$2,460.94	\$8,793.64
2024	\$47.01	\$74.30	\$1,942.87	\$38.92	\$146.70	\$2,249.80	\$9,004.78
2025	\$41.56	\$66.96	\$1,763.48	\$34.91	\$137.11	\$2,044.02	\$9,210.56
2026	\$36.43	\$59.31	\$1,587.71	\$31.00	\$127.75	\$1,842.20	\$9,412.38
2027	\$31.18	\$52.21	\$1,415.07	\$27.09	\$118.61	\$1,644.16	\$9,610.42
2028	\$26.27	\$44.90	\$1,247.42	\$23.32	\$109.60	\$1,451.50	\$9,803.08
2029	\$21.23	\$37.87	\$1,077.53	\$19.52	\$100.50	\$1,256.64	\$9,997.94
2030	\$15.92	\$30.34	\$904.64	\$15.58	\$91.30	\$1,057.78	\$10,196.80
2031	\$10.74	\$23.08	\$728.86	\$9.48	\$81.99	\$854.14	\$10,400.44
2032		\$15.31	\$550.65	\$7.64	\$72.56	\$646.16	\$10,608.42
2033			\$370.11	\$5.76	\$63.00	\$438.87	\$10,815.71

Summary of Bond Credits	Series 2011A	Series 2011B	Series 2012	Series 2014	Future Bond	Total Credits	Maximum Impact Fee
2034				\$3.89	\$53.31	\$57.19	\$11,197.39
2035					\$43.46	\$43.46	\$11,211.12
2036					\$33.23	\$33.23	\$11,221.35
2037					\$22.58	\$22.58	\$11,232.00

Application of ERCs

Section 5.0 of the IFFP discusses in detail the methodology and research that are used to define the application of ERCs to specific development types. This information is summarized as follows:

Residential – This is the standard home of 3,000 square feet of living space and less, and represents most of the customers served, and is defined as the standard unit of 1.0 ERC.

Condominiums and Town Homes – These are considered similar and are smaller homes (less than 1,700 square feet of living space), which have attached walls and share a common irrigated area, which acreage is typically small when related to each unit. These are defined as 0.75 ERC units and water fees are assessed at such multiplier relative to the standard ERC.

Large Residential – These homes account for most of the larger homes in more “up-scale” neighborhoods of the District. These are defined as homes above the 3,000 square foot living space and are assessed based on a linear formula, relative to the standard ERC.

The impact on the annual supply requirement (in gallons) of a home will be calculated using the livable area in square feet, multiplied by 47 and adding 37,000. This value will then be divided by the standard annual ERC Level of Service to arrive at an ERC multiplier (i.e. 1.8). All other impact fee elements will then be derived using this same calculated multiplier. This calculation is necessary due to the increased peak loads on sources and additional irrigation demands imposed upon the water system infrastructure by progressively larger homes, as seen in historical water use data as demonstrated in the IFFP (pp. 36-37).

Non-Standard Demand Adjustments

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

CERTIFICATION

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 District staff 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 the District and outside sources.

ZIONS PUBLIC FINANCE, INC.