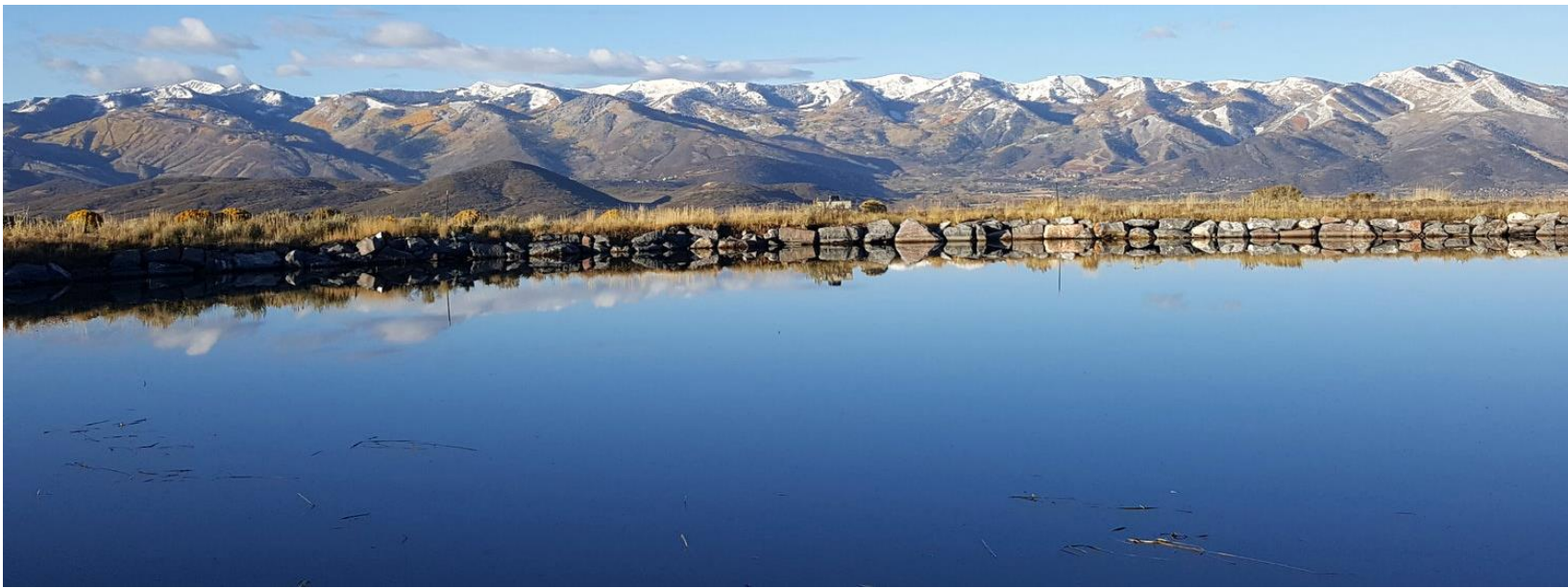


# Mountain Regional Water District



## 2023 Water Impact Fee Analysis



**MOUNTAIN  
REGIONAL  
WATER**



Zions Public Finance, Inc.  
November 2023

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## EXECUTIVE SUMMARY

Mountain Regional Water District (the District) 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 November 2023.<sup>1</sup>

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

Level of service is defined in the Impact Fees Act as “the defined performance standard or unit of demand for each capital component of a public facility within a service area” and is defined in this IFA for water rights, source, storage, distribution and operations.

#### Water Service Area

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

#### Growth in Water Demand

Water demand is expected to grow by approximately 827 peak day gpm in the GSA and by 712 peak day gpm in Promontory.

TABLE 1: GROWTH IN WATER DEMAND 2023-2033

	Peak Day (gpm)			Annual Demand (ac-ft)		
	2023	2033	Growth 2023-2033	2023	2033	Growth 2023-2033
GSA	3,809	4,636	827	2,366	3,300	934
Promontory	2,235	2,947	712	1,301	1,773	472
TOTAL	6,044	7,583	1,539	3,667	5,073	1,406

Source: IFFP, Table 8

#### Water Capital Facilities

There is existing excess capacity in the District’s facilities as outlined in Table 2 that will serve new development through 2033.

<sup>1</sup> This report was prepared by Bowen Collins & Associates

TABLE 2: EXCESS CAPACITY TO SERVE NEW DEVELOPMENT, 2023-2033

Description	GSA	Promontory
Source	\$2,380,813	\$0
Storage	\$1,052,369	\$308,412
Booster Pump	\$675,964	\$52,070
Distribution	\$2,297,276	\$31,491
Operations	\$239,074	\$206,380
<b>TOTAL</b>	<b>\$6,645,495</b>	<b>\$598,353</b>

Source: IFFP; District Asset List; ZPFI

In addition, the District has 54.19 percent excess capacity in its water rights that will serve new development between 2023 and 2033. The total actual cost of the District's eligible water rights is \$5,041,630 based on the District's Asset List.

The cost of capital facilities necessitated by new development are identified in the District's IFFP and shown in Table 3.

TABLE 3: NEW IMPROVEMENTS TO SERVE NEW DEVELOPMENT, 2023-2033

New Improvements	GSA	Promontory
New Projects	\$11,305,845	\$4,998,995

Source: IFFP, Table 9; ZPFI

### Culinary Water Impact Fee Calculation

The impact fee calculation is shown in the table below and includes the cost of buying into excess capacity, new construction projects, consultant costs and a credit for the existing fund balance.

TABLE 4: PROPORTIONATE SHARE ANALYSIS – GROSS FEE BEFORE CREDITS

SUMMARY BEFORE CREDITS	GSA	Promontory
Existing Excess Capacity	\$11,339.60	\$839.97
New Construction	\$13,670.91	\$7,021.06
Consultant Costs	\$13.05	\$13.05
Fund Balance Credit	(\$5,028.57)	(\$577.66)
<b>Gross Fee per gpm before Credits</b>	<b>\$19,994.99</b>	<b>\$7,296.42</b>

### 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 have been made for the portion of outstanding bonds that will benefit existing development.

Credits must also be made for the District's outstanding bonds – Series 2008, 2011A, 2011B, 2014, 2019A and 2019B. A credit is made only for the portion of the bonds that benefit existing development so that new development is not charged twice.<sup>2</sup>

TABLE 5: CREDITS FOR PROJECTS BENEFITTING EXISTING DEVELOPMENT AND OUTSTANDING BONDS

Year	New Projects Benefit Existing	Bonds - Series 2011A	Bonds Series 2011B	Bonds Series 2014	Bonds Series 2019A	TOTAL CREDITS ALL
2023	(\$1,360.48)	(\$12.49)	(\$16.87)	(\$205.33)	(\$548.98)	(\$2,144.15)
2024	(\$1,302.07)	(\$11.21)	(\$15.30)	(\$181.27)	(\$505.88)	(\$2,015.73)
2025	(\$1,243.56)	(\$9.89)	(\$13.75)	(\$157.03)	(\$462.25)	(\$1,886.46)
2026	(\$1,184.89)	(\$8.57)	(\$12.13)	(\$132.35)	(\$417.91)	(\$1,755.85)
2027	(\$1,125.99)	(\$7.21)	(\$10.52)	(\$107.02)	(\$372.77)	(\$1,623.51)
2028	(\$1,066.79)	(\$5.85)	(\$8.85)	(\$81.25)	(\$326.96)	(\$1,489.70)
2029	(\$1,007.23)	(\$4.44)	(\$7.17)	(\$54.88)	(\$280.36)	(\$1,354.08)
2030	(\$947.22)	(\$2.98)	(\$5.42)	(\$27.70)	(\$232.71)	(\$1,216.04)
2031	(\$886.69)	(\$1.52)	(\$3.67)		(\$184.12)	(\$1,076.00)
2032	(\$825.55)		(\$1.84)		(\$126.87)	(\$954.26)
2033	(\$763.73)				(\$68.31)	(\$832.04)
2034	(\$701.14)				(\$8.10)	(\$709.24)
2035	(\$637.68)					(\$637.68)
2036	(\$578.71)					(\$578.71)
2037	(\$518.10)					(\$518.10)
2038	(\$454.47)					(\$454.47)
2039	(\$387.65)					(\$387.65)
2040	(\$317.50)					(\$317.50)
2041	(\$243.84)					(\$243.84)
2042	(\$166.49)					(\$166.49)
2043	(\$85.27)					(\$85.27)

Credits are then subtracted from the gross fee to calculate the maximum fee per gpm per year.

TABLE 6: MAXIMUM FEES PER GPM AFTER CREDITS

Year	TOTAL CREDITS ALL	GSA Max Fee	Promontory Max Fee
2023	(\$2,144.15)	\$17,850.84	\$5,152.27
2024	(\$2,015.73)	\$17,979.26	\$5,280.69
2025	(\$1,886.46)	\$18,108.53	\$5,409.95
2026	(\$1,755.85)	\$18,239.14	\$5,540.57
2027	(\$1,623.51)	\$18,371.49	\$5,672.91
2028	(\$1,489.70)	\$18,505.29	\$5,806.72
2029	(\$1,354.08)	\$18,640.91	\$5,942.34
2030	(\$1,216.04)	\$18,778.95	\$6,080.37
2031	(\$1,076.00)	\$18,919.00	\$6,220.42
2032	(\$954.26)	\$19,040.73	\$6,342.16

<sup>2</sup> No credits are necessary for Series 2008 and 2019B.

Year	TOTAL CREDITS ALL	GSA Max Fee	Promontory Max Fee
2033	(\$832.04)	\$19,162.95	\$6,464.38
2034	(\$709.24)	\$19,285.76	\$6,587.18
2035	(\$637.68)	\$19,357.31	\$6,658.73
2036	(\$578.71)	\$19,416.29	\$6,717.71
2037	(\$518.10)	\$19,476.89	\$6,778.32
2038	(\$454.47)	\$19,540.52	\$6,841.95
2039	(\$387.65)	\$19,607.34	\$6,908.76
2040	(\$317.50)	\$19,677.49	\$6,978.92
2041	(\$243.84)	\$19,751.16	\$7,052.58
2042	(\$166.49)	\$19,828.50	\$7,129.93
2043	(\$85.27)	\$19,909.72	\$7,211.14

### 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

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### Summary

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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

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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

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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.

### Utah Code Legal Requirements

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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. Current demand is for 6,044 peak gpm. This is projected to grow to 7,583 gpm by 2033, or growth of 1,539 gpm. Throughout this impact fee analysis, a 10-year growth window will be the basis for the impact fee calculation. There must be a balance between the costs of the facilities that will meet the ten-year demand and the gpm demand 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 7: GROWTH IN WATER DEMAND

	Peak Day (gpm)			Annual Demand (ac-ft)		
	2023	2033	Growth 2023-2033	2023	2033	Growth 2023-2033
GSA	3,809	4,636	827	2,366	3,300	934
Promontory	2,235	2,947	712	1,301	1,773	472
TOTAL	6,044	7,583	1,539	3,667	5,073	1,406

Source: IFFP

### Existing and Proposed LOS Analysis

Level of service is defined in the Impact Fees Act as "the defined performance standard or unit of demand for each capital component of a public facility within a service area."

The IFFP provides the following service levels.

#### **Water Rights**

*For water rights, the performance standard means the District maintains sufficient water rights to satisfy culinary and secondary water demands on an annual basis.*

#### **Source Production**

*Water production must be adequate to satisfy demands on both an annual and peak day basis. Production of supplies must consider seasonal limitations in supply availability and reductions in*

yield because of dry year conditions. Production capacity must be capable of satisfying all sources of demand including secondary demands where applicable.

### **Storage**

Three major criteria are generally considered when sizing storage facilities for a water distribution system: operational or equalization storage, fire flow storage, and emergency or standby storage.

1. **Equalization Storage:** Equalization storage is the storage required to satisfy the difference between the maximum rate of supply and the rate of demand during peak conditions. Sources, major transmission pipelines, and pump stations are usually sized to convey peak day demands to optimize the capital costs of infrastructure. During peak hour demands, storage is needed to meet the difference in source/conveyance capacity and the increased peak instantaneous demands. Equalization storage was reviewed a few different ways for the District including reviewing the typical water use patterns of the District and comparing it to State of Utah minimum storage recommendations.
2. **Fire Flow Storage:** Fire flow storage is the amount of water needed to combat fires occurring in the distribution system. This storage is calculated based on the fire flow rate for structures in each area of the system multiplied by a specified duration as required by the fire authority. Smaller residential homes have a fire flow requirement of 1,000 gpm for 2 hours while larger homes may have fire flow demands between of 1,500 gpm for a duration of 2 hours (180,000 gallons) or 2,000 gpm for 2 hours. Typical commercial facilities require a fire flow of at least 2,000 gpm for a duration of 2 hours (240,000 gallons). For some buildings in the District, the fire authority requires even greater fire flow. Park City Fire District provided feedback on required fire flows for various areas of the District.
3. **Emergency Storage:** Emergency or standby storage is the storage needed to meet demands in the event of an emergency such as a failure at a production well, booster pump, or treatment plant, or a line break or other unexpected event. The State of Utah recommended sizing standard includes some buffer for emergency storage.

Storage requirements are calculated for the system as a whole and for each individual zone.

### **Distribution**

Based on input from District staff, the following criteria were used as the performance standards for major conveyance facilities:

1. The system was evaluated for existing conditions and projected conditions at buildout. Each demand scenario included model runs at both peak day and peak hour demand.
2. The District requires pumps to deliver water from sources and lower pressure zones to higher pressure zones. Pumping stations must be sized to deliver flow to destination storage reservoirs such that the level in the reservoirs at the end of a peak day of demand is the same as the level in the reservoir at the beginning of the day. In addition, each pressure zone should have sufficient redundant capacity such that it can experience a failure of one of the pumps in the zone and still meet the peak day demands as described above. In essence, pump stations must be sized to reliably satisfy peak day demands in their respective service areas.
3. Under peak hour demand, the system must be capable of limiting the maximum rate of draining in all system tanks and reservoirs to two times the tank or reservoir's size (e.g., - a 1-million-gallon tank will drain at a rate of two mgd or less during the peak hour). This

*criterion limits the fluctuation of all tanks and reservoirs to 50 percent of their total volume during a peak day and ensures operational storage is adequate.*

4. *The system should be capable of maintaining 40 psi during peak day demand and 30 psi during peak hour demand.*
5. *If any major source fails or is off-line, the system must be capable of conveying water from the remaining sources to all points of demand at a demand rate equal to the production rate of the remaining sources.*
6. *If any major transmission line fails or is off-line, the system must be capable of delivering water from other delivery points sufficient to satisfy average day demand conditions.*
7. *Per requirements of the State of Utah, the system must be able to meet fire flow demands and still maintain greater than 20-psi residual pressure in the distribution system under peak day demand conditions. Fire flow demands were set at 1,500 gpm for residential areas, with higher custom fire flows for a few other large structures as established by the fire authority.*

### **Operations Support**

*The Operations Support category includes the District facilities that are used to support water system operations and maintenance. Included in this category are office and maintenance space and other miscellaneous facilities such as the proposed solar array on the SHWTP pond. For these items the performance standard means the District maintains sufficient building capacity and solar arrays to satisfy the operational needs of the District on a daily / annual basis.*

The following table, taken from the IFFP, shows a summary of existing and proposed levels of service (LOS):

TABLE 8: SUMMARY OF EXISTING AND PROPOSED SERVICE LEVELS

	Existing LOS	Proposed LOS
<b>Water Rights</b>		
Acre-feet of water right availability/gpm of peak day demand	2.49	1.37
<b>Source Production</b>		
Gpm of source production / gpm of peak day demand	1.19	1.00
<b>Storage</b>		
Gallons of storage / gpm of peak day demand	2195.3	1675.9
<b>Distribution (Transmission, Pumping and Distribution)</b>		
% of system meeting performance standard of 40 psi min. during peak day demands	97.71%	100%
% of system meeting performance standard of 20 psi min. during fire flows	94.64%	100%
% of system meeting performance standard of 7 fps max. pipe velocity during peak day demands	99.56%	100%
<b>Operations Support</b>		
Administrative and Service Buildings	Satisfactory	Satisfactory
Source: IFFP, Tables 1 and 2		

## 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 gpm, 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.

TABLE 9: WATER RIGHTS EXISTING CAPACITY

Planning Window	Annual Demand (acre-ft)	Use of Existing Facilities (Acre-ft)	Use of Existing Facilities (%)
Existing (2023)	2,366	0	0%
End of 10-year Planning Window (2033)	3,300	1,788	54.19%
Buildout	3,569	1,635	45.81%
<b>Total</b>	<b>3,569</b>	<b>3,423</b>	<b>100%</b>

Source: IFFP

TABLE 10: WATER RIGHTS EXISTING CAPACITY ACTUAL COST

Water Right	Actual Cost
Atkinson 218 af Decreed	\$157,396.00
Timberline 12 af Decreed	\$19,536.00
Timberline 41 af Decreed	\$66,748.00
Timberline 40 af Decreed	\$65,120.00
Fieldstone SLVSM 69 af Decreed	\$301,500.00
Fieldstone WLCRK 20 af Decreed	\$87,380.00
Fieldstone WLCRK 30 af Decreed	\$131,070.00
SCSC 355 af Decreed	\$25,912.41
Silver Springs 179 af Decreed	\$896,800.00
Summit Park 66 af Decreed	\$107,456.32
Summit Park 40 af Decreed	\$65,125.04
Summit Park 145 af Decreed	\$236,078.27
Summit Park 274 af Decreed	\$446,106.70
Silver Creek 325.05 af Decreed	\$1,799,476.80
Atkinson 104 af Decreed	\$575,744.00
Snyderville Rec District - Decreed 11.1 A	\$60,180.54
<b>TOTAL</b>	<b>\$5,041,630</b>

**Water Right****Actual Cost**

Source: MRWSSD Asset List

**Water Source**

The District has some excess capacity that can serve the needs of new development as shown in the table below. In the GSA there is 12.6 percent of excess capacity that will be consumed by new development in the next 10 years in the SHWTP and there is 12.7 percent of excess capacity in the LCBPS that will be consumed. In the Promontory area, there is 23.3 percent of excess capacity that will be consumed over the next 10 years in SHWTP and 15.75 percent in LCBPS.

**TABLE 11: WATER SOURCE CAPACITY ALLOCATION**

Facility	Cost Participation	Capacity Share	2023 Supply Demand		2033 Supply Demand		Build Out Supply Demand	
<i>GSA</i>	<i>%</i>	<i>gpm</i>	<i>gpm</i>	<i>%</i>	<i>gpm</i>	<i>%</i>	<i>gpm</i>	<i>%</i>
GSA Wells	100%	2,020	3,809	100.00%	4,636	0.00%	5,296	0.00%
Well 15B and 15C	83%	1,251		83.40%		0.00%		0.00%
SHWTP	48%	875		35.90%		12.60%		0.00%
LCBPS	36%	2,368	648	10.00%	1,475	12.70%	2,135	13.70%
Facility	Cost Participation	Capacity Share	2023 Supply Demand		2033 Supply Demand		Build Out Supply Demand	
<i>Promontory</i>	<i>%</i>	<i>gpm</i>	<i>gpm</i>	<i>%</i>	<i>gpm</i>	<i>%</i>	<i>gpm</i>	<i>%</i>
Promontory Wells	100%	115	758	100.00%	1,470	0.00%	1,762	0.00%
Well 15B and 15C	17%	249		16.60%		0.00%		0.00%
SHWTP	52%	930		28.20%		23.30%		0.00%
LCBPS	64%	4,132	1,871	41.40%	2,583	15.75%	2,875	6.45%

Source: IFFP

The following tables show the percent of capacity consumed between 2023-2033, as well as the original total cost of the facility. The percent of capacity consumed is multiplied by the total actual cost in order to arrive at the amount allocated to new development over the next 10 years.

**TABLE 12: WATER SOURCE CAPACITY - GSA**

Water Source	Capacity Used 2023-2033	Actual Cost	Cost Consumed 2023-2033
SHWTP	12.60%	\$8,338,851	\$1,050,695
LCBPS	12.70%	\$10,473,369	\$1,330,118

Source: IFFP; MRWSSD; ZPFI

There is no excess buy-in source capacity for Promontory.

**Water Storage**

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

TABLE 13: WATER STORAGE CAPACITY ALLOCATION

Facility	Capacity Shared		2023 Storage Demand		2033 Storage Demand		Build Out Storage Demand		
	GSA	%	Gallons	Gallons	%	Gallons	%	Gallons	%
Blackhawk Tank	100%		350,000	108,917	99.83%	109,080	0.15%	109,105	0.02%
Mid-Mountain	100%		160,000	151,293	97.30%	154,889	2.30%	155,467	0.40%
Olympic	100%		1,000,000	67,373	51.92%	115,315	36.94%	129,768	11.14%
Silver Springs	100%		500,000	275,886	99.40%	277,384	0.50%	277,620	0.10%
Summit Park 1	100%		250,000	59,610	85.20%	68,388	12.50%	70,002	2.30%
Colony White Pine Tank	100%		500,000	113,729	96.20%	117,599	3.30%	118,228	0.50%
Silver Creek Reservoir	75%		1,500,813	807,239	40.50%	1,326,586	26.10%	1,494,047	8.40%
<b>Promontory</b>	<b>%</b>	<b>Gallons</b>	<b>Gallons</b>	<b>%</b>	<b>Gallons</b>	<b>%</b>	<b>Gallons</b>	<b>%</b>	
Silver Creek Reservoir	25%		499,187	268,497	13.50%	441,237	8.70%	496,936	2.80%

TABLE 14: WATER STORAGE CAPACITY COSTS - GSA

Water Storage	2033%	Actual Cost	Cost to 2023-2033
Blackhawk Tank	0.15%	\$255,591	\$383.39
Mid-Mountain	2.30%	\$75,037	\$1,725.85
Olympic	36.94%	\$268,415	\$99,152.62
Silver Springs	0.50%	\$0	\$0.00
Summit Park 1	12.50%	\$101,376	\$12,672.01
Colony White Pine Tank	3.30%	\$400,000	\$13,200.00
Silver Creek Reservoir	26.10%	\$3,544,961	\$925,234.92
<b>Total</b>		<b>\$4,645,380</b>	<b>\$1,052,369</b>

Source: IFFP; MRWSSD; ZPFI

TABLE 15: WATER STORAGE CAPACITY COSTS - PROMONTORY

Water Storage	2033%	Actual Cost	Cost to 2023-2033
Silver Creek Reservoir	8.70%	\$3,544,961	\$308,411.64

Source: IFFP; MRWSSD; ZPFI

### Booster Pumps

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

TABLE 16: BOOSTER PUMPS CAPACITY ALLOCATION

Facility	Capacity Shared		2023 BPS Demand		2033 BPS Demand		Build Out BPS Demand		
	GSA	%	Gallons	Gallons	%	Gallons	%	Gallons	%
Crestview	100%		220	95	68.80%	130	25.2%	139	6.00%
Kilby Booster	100%		275	207	78.10%	254	17.9%	265	4.00%



Facility	Capacity Shared		2023 BPS Demand		2023 BPS Demand		Build Out BPS Demand		
	GSA	%	Gallons	Gallons	%	Gallons	%	Gallons	%
Glenwild	100%		372	284	76.50%	392	23.5%	414	0.00%
Blackhawk	100%		790	561	75.10%	715	20.7%	747	4.20%
Old Ranch Road	100%		1,300	626	79.30%	749	15.6%	789	5.10%
Bear Hollow	100%		390	94	51.92%	160	36.94%	180	11.14%
Silver Springs	100%		1,200	304	76.66%	375	18.07%	396	5.27%
Promontory	%	Gallons	Gallons	%	Gallons	%	Gallons	%	
Spine Booster	100%		885	899	47.10%	1,569	35.1%	1,909	17.80%

Source: IFFP

TABLE 17: BOOSTER PUMPS CAPACITY COST ALLOCATION - GSA

Booster Pumps	2033%	Actual Cost	Cost to 2023-2033
Crestview	25.20%	\$139,593	\$35,177
Kilby Booster	17.90%	\$361,586	\$64,724
Glenwild	23.50%	\$184,031	\$43,247
Blackhawk	20.70%	\$894,156	\$185,090
Old Ranch Road	15.60%	\$820,000	\$127,920
Bear Hollow	36.94%	\$374,445	\$138,320
Silver Springs	18.07%	\$450,943	\$81,485
Spine Booster		NA	NA
<b>Total</b>		<b>\$3,224,754</b>	<b>\$675,964</b>

Source: IFFP; MRWSSD; ZPFI

TABLE 18: BOOSTER PUMPS CAPACITY COST ALLOCATION - PROMONTORY

Booster Pumps	2033%	Actual Cost	Cost to 2023-2033
Spine Booster	35.10%	\$148,348	\$52,070

Source: IFFP; MRWSSD; ZPFI

### Water Distribution

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

TABLE 19: DISTRIBUTION CAPACITY ALLOCATION

Facility	Cost Participation	Capacity Share	2023 Distribution Demand		2023 Distribution Demand		Build Out Distribution Demand	
			GSA	%	gpm	%	gpm	%
Existing Pipes (GSA Only)	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%
Silver Creek Pipeline Extension	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%
Blackhawk (Stonehouse) Vault	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%

Facility	Cost Participation		Capacity Share		2023 Distribution Demand		2033 Distribution Demand		Build Out Distribution Demand	
	%	gpm	gpm	%	gpm	%	gpm	%		
GSA										
Gorgoza Pipeline (acquired from Timberline)	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Old Ranch Road Transmission Line	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Trailside 20" Transmission Line	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Willow Springs Transmission Line	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Gorgoza Transmission Line (I-80 Rasmussen)	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Summit Park - Interconnect Pipeline	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Willow Creek to Old Ranch Pipeline Connection	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Old Highway 40 Transmission Line	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Promontory - spine Road Extension	100%	5,296	3,809	75.00%	4,636	15.00%	5,296	10.00%		
Promontory to Park City 12" MRW Transmission Line	75%	4,247	3,809	56.30%	4,636	11.30%	5,296	7.50%		
Equestrian Transmission Line	75%	5,296	3,809	56.30%	4,636	11.30%	5,296	7.50%		
The EPA Pipeline Extension	75%	5,296	3,809	56.30%	4,636	11.30%	5,296	7.50%		
Lost Canyon - Lost Canyon Raw Water Pipeline	36%	2,368	3,809	9.96%	4,636	12.72%	5,296	13.74%		
Facility	Cost Participation		Capacity Share		2023 Distribution Demand		2033 Distribution Demand		Build Out Distribution Demand	
Promontory	%	gpm	gpm	%	gpm	%	gpm	%		
Promontory to Park City 12" MRW Transmission Line	25%	4,288	3,633	10.70%	4,345	10.10%	4,637	4.10%		
Equestrian Transmission Line	25%	1,762	758	10.70%	1,470	10.10%	1,762	4.10%		
The EPA Pipeline Extension	25%	1,762	758	10.70%	1,470	10.10%	1,762	4.10%		
Lost Canyon - Lost Canyon Raw Water Pipeline*	64%	4,132	1,871	41.36%	2,583	15.75%	2,875	6.45%		

\*These portions of excess capacity have previously been paid for by Promontory's SID and are therefore not recoverable; Source: IFFP

TABLE 20: DISTRIBUTION CAPACITY ALLOCATION - GSA

	2033%	Actual Cost	Cost to 2023-2033
Existing Pipes (GSA Only)	15.00%	\$3,996,091	\$599,414
Silver Creek Pipeline Extension	15.00%	\$0	\$0
Blackhawk (Stonehouse) Vault	15.00%	\$36,472	\$5,471
Gorgoza Pipeline (acquired from Timberline)	15.00%	\$994,485	\$149,173
Old Ranch Road Transmission Line	15.00%	\$800,000	\$120,000
Trailside 20" Transmission Line	15.00%	\$529,029	\$79,354
Willow Springs Transmission Line	15.00%	\$350,000	\$52,500
Gorgoza Transmission Line (I-80 Rasmussen)	15.00%	\$150,000	\$22,500
Summit Park - Interconnect Pipeline	15.00%	\$0	\$0
Willow Creek to Old Ranch Pipeline Connection	15.00%	\$165,901	\$24,885
Old Highway 40 Transmission Line	15.00%	\$399,567	\$59,935
Promontory - spine Road Extension	15.00%	\$4,015,463	\$602,319
Promontory to Park City 12" MRW Transmission Line1	11.30%	\$0	\$0
Equestrian Transmission Line2	11.30%	\$132,018	\$14,918
The EPA Pipeline Extension 2	11.30%	\$179,775	\$20,315
Lost Canyon - Lost Canyon Raw Water Pipeline 2	12.72%	\$4,296,320	\$546,492
<b>Total</b>		<b>\$16,045,120</b>	<b>\$2,297,276</b>

Source: IFFP; MRWSSD; ZPFI

TABLE 21: DISTRIBUTION CAPACITY ALLOCATION - PROMONTORY

Distribution	2033%	Actual Cost	Cost to 2023-2033
Equestrian Transmission Line2	10.10%	\$132,018	\$13,333.79
The EPA Pipeline Extension 2	10.10%	\$179,775	\$18,157.25
<b>Total</b>			<b>\$31,491.05</b>

Source: IFFP; MRWSSD; ZPFI

## Land and Buildings

In addition, there is some excess capacity in the land and buildings.

TABLE 22: LAND &amp; BUILDINGS EXCESS CAPACITY ALLOCATION

Land & Buildings	2033%	Actual Cost	Cost to 2023-2033
GSA	11.7%	\$2,043,364	\$239,073.62
Promontory	10.1%	\$2,043,364	\$206,379.79
<b>Total</b>			<b>\$445,453.41</b>

Source: IFFP; MRWSSD; ZPFI

## CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

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

New capital facilities are needed in order to serve the demands of new development over the next 10 years, as well as to cure existing deficiencies and provide for future growth beyond 10 years.

TABLE 23: NEW IMPROVEMENT COSTS

Project	Construction Year	Total Cost	Cost Participation (GSA/Prom) %	Percent to Existing (GSA/Prom)	Percent to 10 Year Growth (GSA/Prom)	Percent to Growth Beyond 10 Years (GSA/Prom)
New Well Development (Well No. 17)	2031	\$2,000,000	77%/23%	0%/0%	70.2%/20.6%	7.2%/2.1%
Signal Hill Expansion Phase 1 – Expansion <sup>1</sup>	2027	\$7,543,247	77%/23%	0%/0%	70.2%/20.6%	7.2%/2.1%
Signal Hill Expansion Phase 2 – Expansion <sup>1</sup>	2036	\$20,767,713	69%/31%	0%/0%	0%/0%	69.2%/30.8%
Future Interconnection	After 2033					75.04%/24.96%
Old Ranch Road Surge Tank	2030	\$1,076,400	100%/0%	79.3%/0%	15.6%/0%	5.1%/0%
Silver Gate Drive Transmission Line	2031	\$1,892,000	75%/25%	0%/0%	41.7%/17.7%	33.3%/7.3%
Future Highway 40 Transmission Line	2032	\$2,087,000	75%/25%	0%/0%	41.7%/17.7%	33.3%/7.3%
South Point Distribution Line Size Upgrades	2029	\$430,010	75%/25%	0%/0%	41.7%/17.7%	33.3%/7.3%
Solar Array on SHWTP	2025	\$1,800,000	75%/25%	54%/10.7%	11.7%/10.1%	9.4%/4.1%
New Building	2024	\$20,503,872	75%/25%	54%/10.7%	11.7%/10.1%	9.4%/4.1%
<b>Total</b>		<b>\$58,100,242</b>				

Source: IFFP, Table 9

The above costs as allocated in the IFFP between GSA and Promontory, as well as between the following three periods of time: projects that benefit existing development; projects necessitated by new development over the next 10 years; and projects that will benefit development after 10 years.

TABLE 24: NEW IMPROVEMENT COSTS – GSA ALLOCATION

GSA	Total Cost	% to 10 Yr Growth	Cost to 10-Yr Growth	% to Existing	Cost to Existing
New Well Development (Well No. 17)	\$2,000,000	70.1%	\$1,402,000	0.0%	\$0.00
Signal Hill Expansion Phase 1 – Expansion	\$7,543,247	70.1%	\$5,287,816	0.0%	\$0.00
Signal Hill Expansion Phase 2 – Expansion	\$20,767,713	0.0%	\$0	0.0%	\$0.00
Future Interconnection	NA	0.0%	\$0	0.0%	\$0.00
Old Ranch Road Surge Tank	\$1,076,400	15.6%	\$167,918	79.3%	\$853,585.20
Silver Gate Drive Transmission Line	\$1,892,000	41.7%	\$788,964	0.0%	\$0.00
Future Highway 40 Transmission Line	\$2,087,000	41.7%	\$870,279	0.0%	\$0.00
South Point Distribution Line Size Upgrades	\$430,010	41.7%	\$179,314	0.0%	\$0.00
Solar Array on SHWTP	\$1,800,000	11.7%	\$210,600	54.0%	\$972,000.00
New Building	\$20,503,872	11.7%	\$2,398,953	54.0%	\$11,072,090.88
<b>TOTAL</b>	<b>\$58,100,242</b>		<b>\$11,305,845</b>		<b>\$12,897,676</b>

Source: IFFP; ZPFI

TABLE 25: NEW IMPROVEMENT COSTS – PROMONTORY ALLOCATION

Promontory	Total Cost	% to 10 Yr Growth	Cost to 10-Yr Growth	% to Existing	Cost to Existing
New Well Development (Well No. 17)	\$2,000,000.00	20.6%	\$412,000	0.0%	\$0.00
Signal Hill Expansion Phase 1 – Expansion	\$7,543,247.00	20.6%	\$1,553,909	0.0%	\$0.00
Signal Hill Expansion Phase 2 – Expansion	\$20,767,713.00	0.0%	\$0	0.0%	\$0.00
Future Interconnection	NA	0.0%	\$0	0.0%	\$0.00
Old Ranch Road Surge Tank	\$1,076,400.00	0.0%	\$0	0.0%	\$0.00
Silver Gate Drive Transmission Line	\$1,892,000.00	17.7%	\$334,884	0.0%	\$0.00
Future Highway 40 Transmission Line	\$2,087,000.00	17.7%	\$369,399	0.0%	\$0.00
South Point Distribution Line Size Upgrades	\$430,010.00	17.7%	\$76,112	0.0%	\$0.00
Solar Array on SHWTP	\$1,800,000.00	10.1%	\$181,800	10.7%	\$192,600.00
New Building	\$20,503,872.00	10.1%	\$2,070,891	10.7%	\$2,193,914.30
<b>TOTAL</b>	<b>\$58,100,242</b>		<b>\$4,998,995</b>		<b>\$2,386,514</b>

Source: IFFP; ZPFI

## 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 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 GPM

The maximum impact fee is based on the combination of individual costs for the components of water rights, source, storage, distribution, capital operations and allowable professional fees. Each fee for

individual components is based upon the costs of qualifying improvements divided by the total and available capacities.

### Buy-In to Existing Excess Capacity

The following tables show the maximum buy-in costs that the District can assess to each user category according to the calculated gpm.

TABLE 26: PROPORTIONATE SHARE ANALYSIS – COST PER GPM – BUY IN TO EXISTING EXCESS CAPACITY IN GSA

	Growth in gpm Demand	Cost to 2023-2033	Cost per Unit
<b>Water Source</b>			
SHWTP	827	\$1,050,695	\$1,270.49
LCBPS	827	\$1,330,118	\$1,608.36
<b>Storage</b>			
Blackhawk Tank	827	\$383	\$0.46
Mid-Mountain	827	\$1,726	\$2.09
Olympic	827	\$99,153	\$119.89
Silver Springs	827	\$0	\$0.00
Summit Park 1	827	\$12,672	\$15.32
Colony White Pine Tank	827	\$13,200	\$15.96
Silver Creek Reservoir	827	\$925,235	\$1,118.78
<b>Booster Pump</b>			
Crestview	827	\$35,177	\$42.54
Kilby Booster	827	\$64,724	\$78.26
Glenwild	827	\$43,247	\$52.29
Blackhawk	827	\$185,090	\$223.81
Old Ranch Road	827	\$127,920	\$154.68
Bear Hollow	827	\$138,320	\$167.26
Silver Springs	827	\$81,485	\$98.53
Spine Booster	827		
<b>Distribution</b>			
Existing Pipes (GSA Only)	827	\$599,414	\$724.80
Silver Creek Pipeline Extension	827	\$0	\$0.00
Blackhawk (Stonehouse) Vault	827	\$5,471	\$6.62
Gorgoza Pipeline (acquired from Timberline)	827	\$149,173	\$180.38
Old Ranch Road Transmission Line	827	\$120,000	\$145.10
Trailside 20" Transmission Line	827	\$79,354	\$95.95
Willow Springs Transmission Line	827	\$52,500	\$63.48
Gorgoza Transmission Line (I-80 Rasmussen)	827	\$22,500	\$27.21
Summit Park - Interconnect Pipeline	827	\$0	\$0.00
Willow Creek to Old Ranch Pipeline Connection	827	\$24,885	\$30.09
Old Highway 40 Transmission Line	827	\$59,935	\$72.47

	Growth in gpm Demand	Cost to 2023-2033	Cost per Unit
Promontory - spine Road Extension	827	\$602,319	\$728.32
Promontory to Park City 12" MRW Transmission Line1	827	\$0	\$0.00
Equestrian Transmission Line2	827	\$14,918	\$18.04
The EPA Pipeline Extension 2	827	\$20,315	\$24.56
Lost Canyon - Lost Canyon Raw Water Pipeline2	827	\$546,492	\$660.81

Source: MRWSSD Asset List; ZPFI

TABLE 27: PROPORTIONATE SHARE ANALYSIS – COST PER GPM – BUY IN TO EXISTING EXCESS CAPACITY FOR GSA AND PROMONTORY

Land & Buildings	Units	2033%	Actual Cost	Cost to 2023-2033	Cost per Unit
GSA	827	11.7%	\$2,043,364	\$239,073.62	
Promontory	712	10.1%	\$2,043,364	\$206,379.79	
Total	1,539		\$4,086,729	\$445,453.41	
Cost per gpm					\$289.44

TABLE 28: PROPORTIONATE SHARE ANALYSIS – SUMMARY OF BUY-IN TO EXCESS CAPACITY COSTS

	GSA	Promontory
Water Rights	\$3,303.58	\$0.00
Water Source	\$2,878.85	\$0.00
Water Storage	\$1,272.51	\$433.16
Booster Pump Station	\$817.37	\$73.13
Distribution	\$2,777.84	\$44.23
Land and Buildings	\$289.44	\$289.44
<b>TOTAL Excess Capacity</b>	<b>\$11,339.60</b>	<b>\$839.97</b>

## New Improvements

TABLE 29: PROPORTIONATE SHARE ANALYSIS – SUMMARY OF NEW CONSTRUCTION IMPROVEMENTS

Breakout of New Improvements	GSA	Promontory
Source	\$6,689,816	\$1,965,909
Storage	\$167,918	\$0
Distribution	\$1,838,557	\$780,395
Operations & Maintenance	\$2,609,553	\$2,252,691
<b>Total Cost of New Improvements, 2023-2033</b>	<b>\$11,305,845</b>	<b>\$4,998,995</b>
Growth in gpm, 2023-2033	827	712
<b>Cost per gpm</b>		
Source	\$8,089.26	\$2,761.11
Storage	\$203.05	\$0.00
Distribution	\$2,223.16	\$1,096.06
Operations & Maintenance	\$3,155.45	\$3,163.89
<b>Total Cost of New Improvements per gpm</b>	<b>\$13,670.91</b>	<b>\$7,021.06</b>



Consultant costs and a credit for the impact fee fund balance<sup>3</sup> have been included in the calculation of the gross fee for both GSA and Promontory.

TABLE 30: PROPORTIONATE SHARE ANALYSIS – SUMMARY OF GROSS FEE

	GSA	Promontory
Existing Excess Capacity	\$11,339.60	\$839.97
New Construction	\$13,670.91	\$7,021.06
Consultant Costs	\$13.05	\$13.05
Fund Balance Credit	(\$5,028.57)	(\$577.66)
<b>Gross Fee Before Credits</b>	<b>\$19,994.99</b>	<b>\$7,296.42</b>

### Credits Against Impact Fees

Credits must be made for new improvement projects that benefit existing development. The IFFP identifies projects totaling \$12,897,676 that benefit existing development in the GSA and \$2,386,514 in Promontory for a total of \$15,284,190. Credits must be made against these amounts or new development will pay not only its impact fees but also higher rates over time in order to cover the costs attributable to new development. This credit is made by assuming rates will be increased over 20 years to cover the costs of the facilities, calculating an average cost per gpm and then taking the net present value of the future annual payments. These credits, along with the bond credits, are shown in Table 31 below.

TABLE 31: CREDITS FOR PROJECTS BENEFITTING EXISTING DEVELOPMENT

Year	gpm	Payment per Year	Payment per gpm	NPV* Credit
2023	6,044	\$764,210	\$126.44	\$1,360.48
2024	6,182	\$764,210	\$123.61	\$1,302.07
2025	6,324	\$764,210	\$120.85	\$1,243.56
2026	6,469	\$764,210	\$118.14	\$1,184.89
2027	6,617	\$764,210	\$115.49	\$1,125.99
2028	6,769	\$764,210	\$112.90	\$1,066.79
2029	6,924	\$764,210	\$110.37	\$1,007.23
2030	7,083	\$764,210	\$107.89	\$947.22
2031	7,246	\$764,210	\$105.47	\$886.69
2032	7,412	\$764,210	\$103.10	\$825.55
2033	7,583	\$764,210	\$100.78	\$763.73
2034	7,758	\$764,210	\$98.51	\$701.14
2035	8,411	\$764,210	\$90.86	\$637.68
2036	8,535	\$764,210	\$89.54	\$578.71
2037	8,535	\$764,210	\$89.54	\$518.10
2038	8,535	\$764,210	\$89.54	\$454.47
2039	8,535	\$764,210	\$89.54	\$387.65
2040	8,535	\$764,210	\$89.54	\$317.50

<sup>3</sup> Consultant fees are estimated at \$20,084 and the impact fee fund balance at the time of preparation of the IFA is \$4,569,921, with \$4,158,628.26 allocated to GSA and \$411,292.90 allocated to Promontory.

Year	gpm	Payment per Year	Payment per gpm	NPV* Credit
2041	8,535	\$764,210	\$89.54	\$243.84
2042	8,535	\$764,210	\$89.54	\$166.49
2043	8,535	\$764,210	\$89.54	\$85.27

\*NPV = net present value discounted at 5 percent

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 six outstanding bonds: Series 2008, Series 2011A, Series 2011B, Series 2014A, Series 2019A, and Series 2019B. Credits only need to be made on four of the bonds that are paying for existing excess capacity on the same projects for which new development is buying in to excess capacity: Series 2011A, Series 2011B, Series 2014 and Series 2019A.

TABLE 32: BOND CREDITS

	% to Existing	Bond Amount	Bond Series
<b>SOURCE</b>			
<b>GSA</b>			
GSA Wells	100%	\$664,248	Series 2019A
Well 15B and 15C	83%	\$1,844,834	Series 2014
SHWTP	36%	\$500,000	Series 2011A
SHWTP	36%	\$785,590	Series 2019A
SHWTP	36%	\$785,590	Series 2011B
LCBPS	10%	\$605,260	Series 2019A
<b>STORAGE</b>			
Blackhawk Tank	99.80%	\$41,832	Series 2019A
Mid-Mountain	97.30%	\$72,136	Series 2019A
Olympic	51.90%	\$0	n/a
Silver Springs	99.40%	\$0	n/a
Summit Park 1	85.20%	\$0	n/a
Colony White Pine Tank	96.20%	\$400,000	Series 2019A
Silver Creek Reservoir	40.50%	\$1,976,712	Series 2014
<b>BOOSTER PUMP</b>			
Crestview	69%	\$0	n/a
Kilby Booster	78%	\$0	n/a
Glenwild	76%	\$0	n/a
Blackhawk	75%	\$0	n/a
Old Ranch Road	79%	\$820,000	Series 2019A
Bear Hollow	52%	\$0	n/a
Silver Springs	77%	\$0	n/a

	% to Existing	Bond Amount	Bond Series
<b>DISTRIBUTION</b>			
Existing Pipes (GSA Only)	75%	\$0	n/a
Silver Creek Pipeline Extension	75%	\$0	n/a
Blackhawk (Stonehouse) Vault	75%	\$0	n/a
Gorgoza Pipeline (acquired from Timberline)	75%	\$150,000	Series 2019A
Old Ranch Road Transmission Line	75%	\$800,000	Series 2019A
Trailside 20" Transmission Line	75%	\$529,029	Series 2019A
Willow Springs Transmission Line	75%	\$350,000	Series 2019A
Gorgoza Transmission Line (I-80 Rasmussen)	75%	\$500,000	Series 2019A
Summit Park - Interconnect Pipeline	75%	\$275,233	Series 2019A
Willow Creek to Old Ranch Pipeline Connection	75%	\$0	n/a
Old Highway 40 Transmission Line	75%	\$255,036	Series 2019A
Promontory - spine Road Extension	75%	\$292,900	Series 2019A
Promontory to Park City 12" MRW Transmission Line1	56%	\$0	n/a
Equestrian Transmission Line2	56%	\$132,017	Series 2014
The EPA Pipeline Extension 2	56%	\$0	n/a
Lost Canyon - Lost Canyon Raw Water Pipeline2	10%	\$733,628	Series 2019A

### Series 2011A

Series 2011A was issued for \$679,000. Applicable bond amounts in Table 32 above total \$179,500 or 26.44 percent of the total bond.

TABLE 33: SERIES 2011A CREDITS

Debt Series 2011A	Payment per Year	Amt to Existing	gpm	Payment per gpm	NPV*
2023	\$43,533	\$11,508.30	6,044	\$1.90	\$12.49
2024	\$43,955	\$11,619.97	6,182	\$1.88	\$11.21
2025	\$43,362	\$11,463.26	6,324	\$1.81	\$9.89
2026	\$43,770	\$11,570.90	6,469	\$1.79	\$8.57
2027	\$43,162	\$11,410.17	6,617	\$1.72	\$7.21
2028	\$43,554	\$11,513.80	6,769	\$1.70	\$5.85
2029	\$43,930	\$11,613.41	6,924	\$1.68	\$4.44
2030	\$43,292	\$11,444.65	7,083	\$1.62	\$2.98
2031	\$43,654	\$11,540.24	7,246	\$1.59	\$1.52

\*NPV = net present value discounted at 5%

**Series 2011B**

Series 2011B was issued for \$1,278,000. Applicable bond amounts in Table 32 above total \$282,027 or 22.07 percent of the total bond.

TABLE 34: SERIES 2011B CREDITS

Debt Series 2011B	Payment per Year	Amt to Existing	gpm	Payment per gpm	NPV*
2023	\$66,000	\$14,564.76	6,044	\$2.41	\$16.87
2024	\$65,000	\$14,344.09	6,182	\$2.32	\$15.30
2025	\$66,000	\$14,564.76	6,324	\$2.30	\$13.75
2026	\$65,000	\$14,344.09	6,469	\$2.22	\$12.13
2027	\$66,000	\$14,564.76	6,617	\$2.20	\$10.52
2028	\$65,000	\$14,344.09	6,769	\$2.12	\$8.85
2029	\$66,000	\$14,564.76	6,924	\$2.10	\$7.17
2030	\$65,000	\$14,344.09	7,083	\$2.03	\$5.42
2031	\$66,000	\$14,564.76	7,246	\$2.01	\$3.67
2032	\$65,000	\$14,344.09	7,412	\$1.94	\$1.84

\*NPV = net present value discounted at 5%

**Series 2014**

Series 2014 was issued for \$8,140,000. Applicable bond amounts in Table 32 above total \$2,413,485 or 29.65 percent of the total bond.

TABLE 35: SERIES 2014 CREDITS

Debt Series 2014	Payment per Year	Amt to Existing	gpm	Payment per gpm	NPV*
2023	\$699,713	\$207,462.65	6,044	\$34.33	\$205.33
2024	\$694,513	\$205,920.86	6,182	\$33.31	\$181.27
2025	\$693,713	\$205,683.67	6,324	\$32.53	\$157.03
2026	\$697,113	\$206,691.76	6,469	\$31.95	\$132.35
2027	\$694,513	\$205,920.86	6,617	\$31.12	\$107.02
2028	\$694,650	\$205,961.63	6,769	\$30.43	\$81.25
2029	\$698,725	\$207,169.86	6,924	\$29.92	\$54.88
2030	\$694,925	\$206,043.17	7,083	\$29.09	\$27.70

\*NPV = net present value discounted at 5%

**Series 2019A**

Series 2019A was issued for \$25,815,000. Applicable bond amounts in Table 32 above total \$4,591,028 or 17.78 percent of the total bond.

TABLE 36: SERIES 2019A CREDITS

Debt Series 2014	Payment per Year	Amt to Existing	gpm	Payment per gpm	NPV*
2023	\$2,397,569	\$426,391.94	6,044	\$70.55	\$548.98

Debt Series 2014	Payment per Year	Amt to Existing	gpm	Payment per gpm	NPV*
2024	\$2,396,235	\$426,154.58	6,182	\$68.93	\$505.88
2025	\$2,398,276	\$426,517.53	6,324	\$67.45	\$462.25
2026	\$2,401,934	\$427,168.22	6,469	\$66.04	\$417.91
2027	\$2,397,679	\$426,411.36	6,617	\$64.44	\$372.77
2028	\$2,395,833	\$426,083.13	6,769	\$62.95	\$326.96
2029	\$2,400,905	\$426,985.08	6,924	\$61.67	\$280.36
2030	\$2,398,578	\$426,571.22	7,083	\$60.22	\$232.71
2031	\$2,707,868	\$481,576.58	7,246	\$66.46	\$184.12
2032	\$2,705,065	\$481,078.04	7,412	\$64.90	\$126.87
2033	\$2,712,940	\$482,478.51	7,583	\$63.63	\$68.31
2034	\$370,922	\$65,966.11	7,758	\$8.50	\$8.10

\*NPV = net present value discounted at 5%

### Summary of Credits

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 in order to arrive at the maximum impact fee that may be charged each year.

TABLE 37: SUMMARY OF CREDITS

Year	New Projects Benefit Existing	Bonds - Series 2011A	Bonds Series 2011B	Bonds Series 2014	Bonds Series 2019A	TOTAL CREDITS ALL
2023	(\$1,360.48)	(\$12.49)	(\$16.87)	(\$205.33)	(\$548.98)	(\$2,144.15)
2024	(\$1,302.07)	(\$11.21)	(\$15.30)	(\$181.27)	(\$505.88)	(\$2,015.73)
2025	(\$1,243.56)	(\$9.89)	(\$13.75)	(\$157.03)	(\$462.25)	(\$1,886.46)
2026	(\$1,184.89)	(\$8.57)	(\$12.13)	(\$132.35)	(\$417.91)	(\$1,755.85)
2027	(\$1,125.99)	(\$7.21)	(\$10.52)	(\$107.02)	(\$372.77)	(\$1,623.51)
2028	(\$1,066.79)	(\$5.85)	(\$8.85)	(\$81.25)	(\$326.96)	(\$1,489.70)
2029	(\$1,007.23)	(\$4.44)	(\$7.17)	(\$54.88)	(\$280.36)	(\$1,354.08)
2030	(\$947.22)	(\$2.98)	(\$5.42)	(\$27.70)	(\$232.71)	(\$1,216.04)
2031	(\$886.69)	(\$1.52)	(\$3.67)		(\$184.12)	(\$1,076.00)
2032	(\$825.55)		(\$1.84)		(\$126.87)	(\$954.26)
2033	(\$763.73)				(\$68.31)	(\$832.04)
2034	(\$701.14)				(\$8.10)	(\$709.24)
2035	(\$637.68)					(\$637.68)
2036	(\$578.71)					(\$578.71)
2037	(\$518.10)					(\$518.10)
2038	(\$454.47)					(\$454.47)
2039	(\$387.65)					(\$387.65)
2040	(\$317.50)					(\$317.50)

Year	New Projects Benefit Existing	Bonds - Series 2011A	Bonds Series 2011B	Bonds Series 2014	Bonds Series 2019A	TOTAL CREDITS ALL
2041	(\$243.84)					(\$243.84)
2042	(\$166.49)					(\$166.49)
2043	(\$85.27)					(\$85.27)

Credits are then subtracted from the gross fee to calculate the maximum fee per gpm per year.

TABLE 38: MAXIMUM FEES PER GPM AFTER CREDITS

Year	TOTAL CREDITS ALL	GSA Max Fee	Promontory Max Fee
2023	(\$2,144.15)	\$17,850.84	\$5,152.27
2024	(\$2,015.73)	\$17,979.26	\$5,280.69
2025	(\$1,886.46)	\$18,108.53	\$5,409.95
2026	(\$1,755.85)	\$18,239.14	\$5,540.57
2027	(\$1,623.51)	\$18,371.49	\$5,672.91
2028	(\$1,489.70)	\$18,505.29	\$5,806.72
2029	(\$1,354.08)	\$18,640.91	\$5,942.34
2030	(\$1,216.04)	\$18,778.95	\$6,080.37
2031	(\$1,076.00)	\$18,919.00	\$6,220.42
2032	(\$954.26)	\$19,040.73	\$6,342.16
2033	(\$832.04)	\$19,162.95	\$6,464.38
2034	(\$709.24)	\$19,285.76	\$6,587.18
2035	(\$637.68)	\$19,357.31	\$6,658.73
2036	(\$578.71)	\$19,416.29	\$6,717.71
2037	(\$518.10)	\$19,476.89	\$6,778.32
2038	(\$454.47)	\$19,540.52	\$6,841.95
2039	(\$387.65)	\$19,607.34	\$6,908.76
2040	(\$317.50)	\$19,677.49	\$6,978.92
2041	(\$243.84)	\$19,751.16	\$7,052.58
2042	(\$166.49)	\$19,828.50	\$7,129.93
2043	(\$85.27)	\$19,909.72	\$7,211.14

### 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

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

1. includes only the cost of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
  - a. costs of operation and maintenance of public facilities; or
  - b. cost for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
3. offset costs with grants or other alternate sources of payment; and
4. complies in each and every relevant respect with the Impact Fees Act.