



JORDAN VALLEY WATER
CONSERVANCY DISTRICT

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JORDAN VALLEY WATER CONSERVANCY DISTRICT

RETAIL CULINARY WATER IMPACT FEE FACILITIES PLAN (IFFP)
AND IMPACT FEE ANALYSIS (IFA)

8215 SOUTH 1300 WEST
WEST JORDAN, UT 84088

PREPARED BY
JORDAN VALLEY WATER CONSERVANCY DISTRICT &
LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.



CERTIFICATION FOR IMPACT FEE FACILITIES PLAN (IFFP) AND IMPACT FEE ANALYSIS (IFA)

IFFP Certification

Lewis Young Robertson & Burningham, Inc. and Jordan Valley Water Conservancy District jointly certify that the impact fee facilities plans prepared for retail water services:

1. includes only the costs of public facilities that are:
 - a. allowed under the Impact Fees Act; and
 - b. actually incurred; or
 - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.
JORDAN VALLEY WATER CONSERVANCY DISTRICT

IFA Certification

LYRB certifies that the impact fee analysis prepared for retail water services:

1. includes only the costs of public facilities that are:
 - a. allowed under the Impact Fees Act; and
 - b. actually incurred; or
 - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
 - d. offsets costs with grants or other alternate sources of payment; and
3. complies in each and every relevant respect with the Impact Fees Act.

LYRB makes this certification with the following caveats:

1. All of the recommendations for implementations of the IFFP made in the IFFP documents or in the Impact Fee Analysis documents are followed by District Staff and elected officials.
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 LYRB is assumed to be correct, complete, and accurate. This includes information provided by the District as well as outside sources.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.
JORDAN VALLEY WATER CONSERVANCY DISTRICT



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SECTION 1: EXECUTIVE SUMMARY

The purpose of this Retail Water Impact Fee Facilities Plan (“IFFP”), with supporting Impact Fee Analysis (“IFA”), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the “Impact Fees Act,” and help Jordan Valley Water Conservancy District (“JVWCD” or the “District”) plan necessary future capital improvements to meet the demands created by development activity. Based on growth projections more fully described in **SECTION 3** of this study, this analysis addresses the future retail water infrastructure needed to serve the District’s retail water customers through the next six to ten years, as well as the appropriate impact fees the District may impose on new development activity in order to maintain the established level of service (“LOS”). The District supplied much of the information utilized in the analysis for the purposes of calculating the water impact fees. **SECTION 1** provides the summary of the impact fee analysis designed to be understood by a lay person as required in Utah Code Title 11 Chapter 36a Part 3 Section 303.

- ☞ **Impact Fee Service Area:** JVWCD serves both retail and wholesale customers. The impact fees identified in this document will be assessed only to the retail customers in the retail service areas shown in red in **Illustration 3.1**.
- ☞ **Demand Analysis:** The demand units utilized in this analysis are based on typical usage patterns measured in cubic feet per second and gallons per minute (“gpm”). The gpm variable is calculated for equivalent residential units (“ERUs”) generated from the District’s customers.
- ☞ **Level of Service:** The existing LOS for retail customers in the District is 1.14 gpm per ERU.
- ☞ **Excess Capacity:** The District has excess capacity within the current system to serve projected demand through the plan horizon. New growth will buy into this excess capacity and pay their fair share of the value in the existing system. In addition, new facilities will be needed to serve projected growth.
- ☞ **Capital Facilities Analysis:** The District has projected a total of \$229.7M in new capital cost related to system improvements. Approximately \$1.5M is considered impact fee eligible cost related to the retail service area.

PROPOSED RETAIL WATER IMPACT FEE

The retail water impact fees proposed in this analysis will be assessed within all retail service areas of the District. The tables below illustrate the appropriate buy-in component including debt financing costs, and the applicable costs related to conducting the IFFP and IFA analyses. The proportionate share analysis determines the proportionate cost assignable to new development based on the impact fee eligible costs and the estimated ERU demand served by each line item.

TABLE 1.1: IMPACT FEE PER ERU

	Total Cost	Impact Fee Eligible Costs	% to New Growth	Cost to New Growth	% to Retail Service Area	Cost to Retail Service Area	ERUs Served	Cost per ERU
Buy-In Component	\$271,254,060	\$271,254,060	5.09%	\$13,806,344	7.40%	\$1,021,519	765	\$1,335
Debt and Cost of Issuance	\$165,887,163	\$165,887,163	5.09%	\$8,443,359	7.40%	\$624,717	765	\$816
Future Water Projects	\$229,719,561	\$178,901,050	11.47%	\$20,524,394	7.40%	\$1,518,582	765	\$1,984
Professional Expenses	\$12,950	\$12,950	100.00%	\$12,950	100.00%	\$12,950	765	\$17
Total	\$666,873,735	\$616,055,224		\$42,787,047		\$3,177,767		\$4,153

TABLE 1.2: IMPACT FEE PER METER SIZE

Meter Size (In)	ERU Multiplier	Impact Fee per Meter Size	Existing Impact Fee (2013)	% Change
3/4	1.00	\$4,153	\$3,999	3.8%
1	2.00	\$8,305	\$7,998	3.8%
1.5	4.00	\$16,611	\$15,997	3.8%
2	6.40	\$26,577	\$25,595	3.8%
3	15.60	\$64,782		
4	28.60	\$118,767		
6	57.20	\$237,533		
8	113.80	\$472,575		



NON-STANDARD RETAIL WATER IMPACT FEES

The District reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.¹ This adjustment could result in a lower impact fee if the District determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the District should use the following formula:

FORMULA FOR NON-STANDARD WATER IMPACT FEES:

$$\text{Estimated Peak Usage (gpm)} / 1.14 \text{ (gpm)} * \$4,153 = \text{Impact Fee}$$

¹ Utah Code 11-36a-402(1)(c)

SECTION 2: DESCRIPTION OF GENERAL IMPACT FEE METHODOLOGY

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

DEMAND ANALYSIS

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

LEVEL OF SERVICE ANALYSIS

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

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the Impact Fee Facilities Plan provides an inventory of the District's existing **system** facilities. The key component of the facilities inventory is to determine the original construction cost of each facility, to determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

FUTURE CAPITAL FACILITIES ANALYSIS

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

FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES

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

PROPORTIONATE SHARE ANALYSIS

The written impact fee analysis is required under the Impact Fees Act and must identify the impacts placed on the facilities by development activity and how these impacts are reasonably related to the new development. The written impact fee analysis must include a proportionate share analysis, clearly detailing each cost component and the methodology used to calculate each impact fee (UCA 11-36a-304).

² Utah Code 11-36a-302(2)

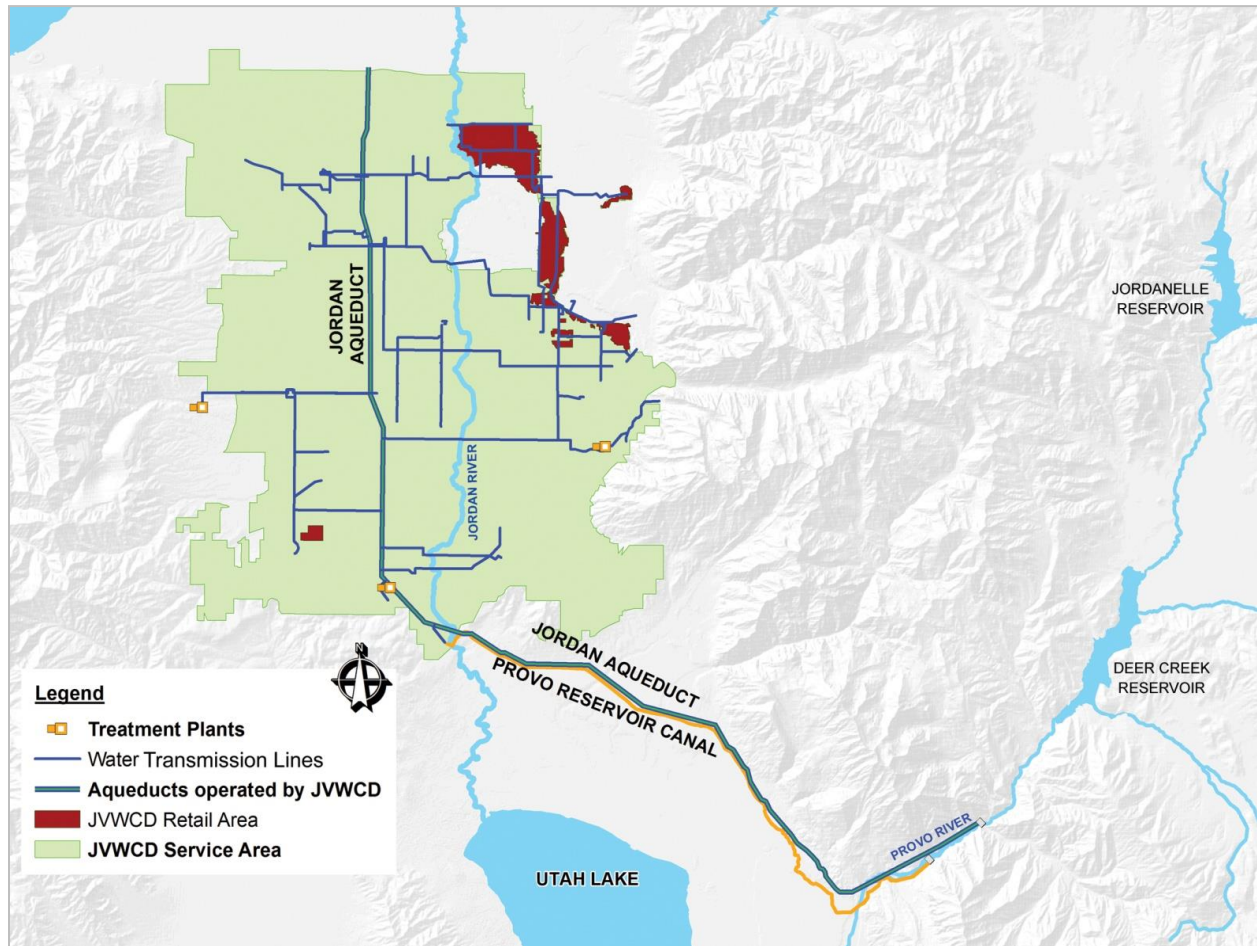
³ Utah Code 11-36a-302(3)

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

SERVICE AREAS

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.⁴ JWVCD currently serves retail water connections in areas found within unincorporated Salt Lake County. The water that retail and wholesale users receive is provided through the District's wells and reservoirs, aqueducts, storage, and pumping facilities and is finally delivered to retail connections by District-owned distribution facilities. The impact fees identified in this document will be assessed to the retail service areas shown in red in **Illustration 3.1**.

ILLUSTRATION 3.1: MAP OF SERVICE AREA



⁴ Utah Code 11-36a-402(1)(a)

DEMAND UNITS

As shown in **Table 3.1**, retail customers within the District are expected to reach 15,729 equivalent residential units (“ERUs”) during the plan horizon. This represents an increase of 765 ERUs from 2019. **Table 3.2** shows the growth expected in overall District water consumption during the plan horizon, of which the retail consumers are a small part. **Table 3.3** shows the different meter categories and the ERU multiplier used to convert to ERUs. It is important to note that the projections of demand and usage for the retail service area produce a slightly lower gpm per ERU variable (1.14 gpm/ERU) when compared to the District-wide data (1.17 gpm/ERU). This analysis assumes the retail area will be based on the actual LOS metrics of 1.14 gpm/ERU.

TABLE 3.1: RETAIL AREA ERU PROJECTIONS

FISCAL YEAR	PROJECTED RETAIL PEAK FLOWS (CFS)	PROJECTED RETAIL PEAK DAY DEMAND (GPM)	PROJECTED RETAIL ERUs @ 1.14 GPM/ERU	ANNUAL GROWTH RATE
2019	38.04	17,058	14,963	0.5%
2020	38.23	17,144	15,038	0.5%
2021	38.42	17,229	15,113	0.5%
2022	38.61	17,315	15,189	0.5%
2023	38.81	17,402	15,265	0.5%
2024	39.00	17,489	15,341	0.5%
2025	39.20	17,577	15,418	0.5%
2026	39.39	17,664	15,495	0.5%
2027	39.59	17,753	15,573	0.5%
2028	39.79	17,841	15,650	0.5%
2029	39.99	17,931	15,729	0.5%
Increase	1.95	872	765	

CFS = Cubic Feet per Second

TABLE 3.2: DISTRICT-WIDE ERU PROJECTIONS

FISCAL YEAR	PROJECTED DISTRICT-WIDE PEAK FLOWS (CFS)	PROJECTED DISTRICT-WIDE PEAK FLOWS (GPM)	PROJECTED DISTRICT-WIDE ERUs @ 1.17 GPM/ERU	ANNUAL GROWTH RATE
2019	317.00	142,152	121,927	1.0%
2020	320.54	143,290	122,903	0.8%
2021	322.09	144,436	123,886	0.8%
2022	324.67	145,591	124,877	0.8%
2023	327.27	146,756	125,876	0.8%
2024	329.88	147,930	126,883	0.8%
2025	332.52	149,114	127,898	0.8%
2026	335.18	150,307	128,921	0.8%
2027	337.87	151,509	129,953	0.8%
2028	340.57	152,721	130,992	0.8%
2029	343.29	153,943	132,040	0.8%
Increase	26.29	11,790	10,113	

TABLE 3.3: ILLUSTRATION OF ERU CONVERSION

METER SIZE (IN)	ERU MULTIPLIER
3/4	1.00
1	2.00
1.5	4.00
2	6.40
3	15.60
4	28.60
6	57.20
8	113.80

LEVEL OF SERVICE STANDARDS

Impact fees cannot be used to finance an increase in the LOS to current or future users of capital improvements. Therefore, it is important to identify the retail water level of service currently provided within the District to ensure that the new capacities of projects financed through impact fees do not exceed the established standard. According to the District, the current LOS for the retail service area is 1.14 gallons per minute (“gpm”) per ERU. Current peak day capacity for the entire system is 334 cubic feet per second (“cfs”).

SECTION 4: EXISTING FACILITIES INVENTORY

EXCESS CAPACITY AND SYSTEM VALUE

The intent of the equity buy-in component is to recover the costs of the unused capacity in existing infrastructure from new development. **Table 4.1** illustrates that 17 cfs of excess capacity exists in the current system, or approximately five percent of the total capacity available. According to the demand projections, new growth will utilize 26.29 cfs in the next ten years, which exceeds the available capacity within the system. The retail system is projected at 7.4 percent of the total new demand. New development will be required to buy-in to this excess capacity and fund growth-related expansion to the system.

TABLE 4.1: ILLUSTRATION OF EXCESS CAPACITY

	SYSTEM BUY-IN (cfs)	GPM	ERUs
Total Capacity (cfs)	334.00	149,776	131,382
Unused Capacity (cfs)	17.00	7,623	6,687
% Unused	5.09%	5.09%	5.09%
Demand in IFFP	26.29	11,790	10,343
Remaining to Serve	9.29	4,167	3,655
IFFP New Demand from Retail System	1.95	872	765
Retail System as % of Total New Demand	7.40%	7.40%	7.40%

For purposes of this impact fee analysis, a buy-in component is calculated using the original cost of existing assets as presented in the District's financial records and shown in **Table 4.2**. The total system value included in the impact fee calculation is approximately \$424.6 million. This analysis has removed all funding that has come from grants and donations as shown in **Table 4.3** to ensure that none of those infrastructure items are included in the established level of service or buy-in analysis.

TABLE 4.2: DETERMINATION OF VALUE OF EXISTING SYSTEM FOR BUY-IN ANALYSIS

DESCRIPTION	ORIGINAL COST
System Components	
Land	\$37,674,227
Office Building	\$21,101,154
Jordan Aqueduct System	\$53,572,216
Wells and Equipment	\$55,025,443
Reservoirs	\$32,788,281
Water Lines and Equipment	\$195,921,552
Telemetry	\$7,958,227
Source of Supply	\$19,208,088
Treatment Plant	\$101,388,140
Total Water System	\$524,637,329
Less Administrative Space	(\$21,101,154)
Less Grants and Developer Contributions	(\$78,939,721)
Current System Value	\$424,596,453

TABLE 4.3: GRANTS AND DEVELOPER CONTRIBUTIONS

	SWJVGWP	DEVELOPER CONTRIBUTIONS	GRANT REVENUE	TRANSFER OF JJVWTP & TERM RESERVOIR
FYE 6/30/2003	-	\$38,172	-	-
FYE 6/30/2004	-	-	\$30,000	-
FYE 6/30/2005	\$2,890,954	\$11,013	\$622,929	-
FYE 6/30/2006	\$1,620,065	\$39,413	\$49,288	-
FYE 6/30/2007	-	-	\$249,111	-
FYE 6/30/2008	-	\$45,760	\$1,791,850	\$10,484,977
FYE 6/30/2009	-	\$22,327	\$35,733	-
FYE 6/30/2010	\$17,193,260	-	\$39,586	-
FYE 6/30/2011	\$8,497,472	-	\$603,224	-
FYE 6/30/2012	\$6,546,878	\$110,958	\$1,929,610	-



	SWJVGWP	DEVELOPER CONTRIBUTIONS	GRANT REVENUE	TRANSFER OF JWVTP & TERM RESERVOIR
FYE 6/30/2013	\$3,098,943	\$42,126	\$531,870	-
FYE 6/30/2014	\$3,099,655	\$55,926	\$26,141	-
FYE 6/30/2015	\$3,099,655	\$44,370	\$88,996	-
FYE 6/30/2016	\$2,821,928	\$584,285	\$584,285	-
FYE 6/30/2017	\$287,749	\$15,920	\$29,835	-
FYE 6/30/2018	\$9,205	\$57,600	\$2,737	-
Subtotal	\$49,165,764	\$748,785	\$6,615,198	\$10,484,977
Combined Total				\$67,014,721
Grants and Contributions (2003 Study)				\$11,925,000
Total Grants and Developer Contributions				\$78,939,721

MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The District has funded its existing capital infrastructure through a combination of different revenue sources, including impact fees, user fees, the issuance of debt, and grant monies. The financing costs and interest associated with the debt to fund the existing facilities has been included in the analysis when determining the buy-in system value. **Tables 4.4 and 4.5** show the debt considered in this analysis. The total amount of interest included in the calculation of the impact fee is \$165,887,163.

TABLE 4.4: DEBT CONSIDERED IN ANALYSIS

Series 1992A Capital Appreciation Water Revenue Bonds ¹	Series 2009B Taxable Water Revenue Bonds (BAB) ²
Series 2001A Water Revenue Bonds ³	Series 2009C Water Revenue Bonds ²
Series 2002A Water Revenue Bonds ²	Series 2010A Taxable Water Revenue Bonds (BAB) ²
Series 2005A Water Revenue Bonds ⁴	Series 2010B Water Revenue Refunding Bonds ⁷
Series 2005B Water Revenue Bonds ²	Series 2010C Taxable Water Revenue Bonds (BAB) ²
Series 2007A Water Revenue Refunding Bonds ⁵	Series 2011A Water Revenue Refunding Bonds ⁸
Series 2007B Water Revenue Bonds ²	Series 2011B Water Revenue Bonds ²
Series B - 1 Water Revenue Bonds ⁶	Series 2013 Water Revenue Refunding Bonds ⁹
Series 2009A Water Revenue Bonds ²	Series 2014 A&B Water Revenue and Refunding Bonds ¹⁰
Series 2007B Water Revenue Bonds ²	Series 2016 Water Revenue Bonds ²
Series B - 1 Water Revenue Bonds ⁶	Series 2017 Water Revenue Refunding Bonds ¹¹
Series 2009A Water Revenue Bonds ²	Series 2017B Water Revenue Refunding Bonds ¹²
Series 2009A Water Revenue Bonds ²	Series 2019A Water Revenue Bonds ²

1. Bond proceeds went to defease the District's Series 1989 Water Revenue Bonds
2. Bond proceeds were used for water system improvements
3. Bond proceeds were used to defease the callable bonds of the District's Series 2000A Water Revenue Bonds
4. Bonds proceeds were used to refund the Series 1993 & Series 1998 Bonds
5. Bonds proceeds were used to refund the callable portion of the Series 2002A Bonds (UWFA Series 2002C Bonds)
6. Bonds proceeds were used to refund the callable portion of the UWFA Series A-5, 14 & 21 Bonds
7. Bonds proceeds were used to refund the Series 2000A Bonds
8. Bonds proceeds were used to refund the Series 2001A Bonds
9. Bonds proceeds were used to refund the callable portion of the Series 2005B Bonds
10. Bonds proceeds were used to refund the callable portion of the Series 2005A Bonds and fund water system improvements
11. Bonds proceeds were used to refund the Series 2007A Bonds maturing on or after October 1, 2018
12. Bonds proceeds were used to refund portions of the Series 2009B, Series 2010C and 2011B Bonds

TABLE 4.5: DEBT SUMMARY

	HISTORIC DEBT
Total District Debt (Principal)	\$399,250,000
Retail Related Projects for New Capacity	\$255,061,442
Total District Debt (Interest)	\$259,664,688
Applicable Interest for New Capacity	\$165,887,163

SECTION 5: CAPITAL FACILITY ANALYSIS

According to the demand projections, new growth will utilize 26.29 cfs in the next ten years, which exceeds the available capacity within the system. New development will be required to buy-in to this excess capacity and fund growth-related expansion to the system. The District has determined the future projects that will be needed in preparation for growth. These projects will be put in place over the next ten years so there is sufficient capacity available ahead of projected growth. This helps avoid deficiencies in the system caused by development occurring before the associated water projects can be constructed to accommodate the new demand.

TABLE 5.1: ILLUSTRATION OF FUTURE CAPITAL IMPROVEMENTS

PROJECT	CATEGORY	TOTAL COST	TIME-ADJUSTED COST	COST TO GROWTH
New Wells and Groundwater Development	CP3	9,000,000	9,920,572	7,147,727
New Pipelines	CP3	68,236,516	78,779,751	72,393,555
New Storage Reservoirs	CP3	8,040,000	10,743,337	-
New Booster Stations, Capacity Improvements	CP3	12,317,700	14,984,443	-
Conventional Water Treatment Plant Improvements	CP3	62,475,000	77,487,788	77,487,788
Membrane Treatment Facilities	CP3	-	-	-
Irrigation Stock Purchases	CP3	7,804,800	9,189,915	-
Central Utah WCD - Central Water Project	CP3	21,528,000	21,871,980	21,871,980
Projects Benefiting Outside Boundary	CP4	5,670,000	6,741,776	6,741,776
Total		\$195,072,016	\$229,719,561	\$185,642,826
Cost Attributed to Retail Area				\$178,901,050

As shown above, a total of \$229.7M in system improvements will be needed, but only \$178.9M have been identified as impact fee eligible. The proposed improvements are estimated to add a total of 81 cfs capacity to the system. As shown in **Table 4.1**, excess capacity will be able serve a portion of the projected growth in the IFFP. A remaining 9.29 cfs, or 11.47 percent, will be served by the proposed future improvements. The retail service area represents 7.4 percent of the total new demand projected in the planning horizon.

TABLE 5.2: ALLOCATION OF FUTURE PROJECTS TO NEW GROWTH IN RETAIL SERVICE AREA

	DISTRICT WIDE CFS	ERUs (BASED ON EXISTING LOS)	NOTES
Existing Demand (CFS)	317.00	121,927	Current Demand (2019)
Total Existing System Capacity (CFS)	334.00	131,382	Total Existing System Capacity
Unused Capacity	17.00	6,687	334.00 – 317.00 = 17.00 cfs
Percent of Existing Capacity to Growth	5.09%	5.09%	17.00 cfs / 334 cfs = 5.09%
Add Demand within IFFP (CFS)	26.29	10,343	Total District-Wide Demand Added to System in IFFP Horizon, See Table 3.2
Added Capacity	81.00	31,862	Source: JVVCD
Remaining Demand to Serve in IFFP	9.29	3,655	26.29 cfs in IFFP – 17.00 cfs of Excess Capacity = 9.29 cfs
% of New Added Capacity within IFFP	11.47%	11.47%	9.29 cfs / 81 cfs of Added System Capacity = 11.47%
Remaining Demand to Serve in IFFP	1.95	765	Total Retail Demand Added to System in IFFP Horizon, See Table 3.1
% of New Added Capacity within IFFP	7.40%	7.40%	1.95 Retail cfs Demand / District Demand in IFFP Horizon of 26.29 cfs = 7.4%

The capital improvements identified in this analysis are related to new development activity within the 10-year window and are necessary to maintain the established LOS. Consistent with applying a time-price differential inherent in the timing of construction improvements, the estimated construction costs have been inflated by a very conservative one percent per year until the projected year of actual construction. Furthermore, it is assumed that all projects on the list will be fully funded by the District without the use of grants or other sources.

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing public facilities designed to provide services to service areas within the community at large and future public facilities that are intended to provide services to service areas within the community at large.⁵ Project

⁵ Utah Code 11-36a-102(20)

improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.⁶

FUNDING OF FUTURE FACILITIES

The IFFP must also include a consideration of all revenue sources, including impact fees and the dedication of system improvements, which may be used to finance system improvements.⁷ In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.⁸

In considering the funding of future facilities, the District has determined that the projects constructed in the next ten years will be funded through a combination of utility rate revenues and impact fees, which are an appropriate funding and repayment mechanism of growth-related improvements. Where applicable, impact fees can offset the cost of future facilities. However, impact fees cannot be used to fund non-qualified expenses (i.e. the costs to cure existing deficiencies, to raise the level of service, to recoup more than the actual cost of system improvements, the cost to fund overhead cannot be included in the calculation of impact fees. Other revenues such as utility rate revenues, property taxes, sales tax revenues, grants, or loans can be used to fund these types of expenditures, as described below.

UTILITY RATE REVENUES

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

PROPERTY TAX REVENUES

Property tax revenues are not specifically identified in this analysis as a funding source for growth-related capital projects, but inter-fund loans can be made from the general fund which will ultimately include some property tax revenues. Inter-fund loans will be repaid once sufficient impact fee revenues have been collected.

GRANTS AND DONATIONS

The improvements outlined for the next ten years will not be funded through impact fees. However, if the impact fees are revised in the future to include future projects, grants and donations will need to be considered. The impact fees will be adjusted if grants become available to reflect the grant monies received. A donor will be entitled to a reimbursement for the value of the improvements funded through impact fees if donations are made by new development. The analysis of existing facilities excludes grants, donations, and developer contributions.

IMPACT FEE REVENUES

Impact fees have become an ideal mechanism for funding growth-related infrastructure. Impact fees are charged to ensure that new growth pays its proportionate share of the costs for the development of public infrastructure. Impact fee revenues can also be attributed to the future expansion of public infrastructure if the revenues are used to maintain an established level of service. Increases to an existing level of service cannot be funded with impact fee revenues. The primary purpose of this analysis is to accurately assess the true impact of a particular user upon the District's water infrastructure and to prevent existing users from subsidizing new growth.

DEBT FINANCING

In the event the District has not amassed sufficient impact fees to pay for the construction of time sensitive or urgent capital projects needed to accommodate new growth, the District must look to revenue sources other than impact fees for funding. The Impact Fees Act allows for the costs related to the financing of future capital projects to be legally included in the impact fee. This allows the District to finance and quickly construct infrastructure for new development and reimburse itself later from impact fee revenues for the costs of principal and interest.

⁶ Utah Code 11-36a-102(13)

⁷ Utah Code 11-36a-302(2)

⁸ Utah Code 11-36a-302(3)



EQUITY OF IMPACT FEES

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

NECESSITY OF IMPACT FEES

An entity may only impose impact fees on development activity if the entity's plan for financing system improvements establishes that impact fees are necessary to achieve parity between existing and new development. This analysis has identified the appropriate buy-in component for new development activity. This is a necessary and important funding mechanism to help offset the costs of system improvements related to new growth.

SECTION 6: RETAIL WATER IMPACT FEE CALCULATION

The District currently provides retail water to its residents and businesses. As a result of new growth, the culinary system is in need of expansion to perpetuate the established level of service (“LOS”) that the District has constructed.

PROPOSED RETAIL WATER IMPACT FEE

The retail water impact fees proposed in this analysis will be assessed within all retail service areas of the District. The tables below illustrate the appropriate buy-in component including debt financing costs, and the applicable costs related to conducting the IFFP and IFA analyses. The proportionate share analysis determines the proportionate cost assignable to new development based on the impact fee eligible costs and the estimated ERU demand served by each line item. For a description of the percentage allocation of buy-in and future facilities, see **Table 5.2**.

TABLE 6.1: CALCULATION OF PROPORTIONATE IMPACT FEE

	Total Cost	Impact Fee Eligible Costs	% to New Growth	Cost to New Growth	% to Retail Service Area	Cost to Retail Service Area	ERUs Served	Cost per ERU
Buy-In Component	\$271,254,060	\$271,254,060	5.09%	\$13,806,344	7.40%	\$1,021,519	765	\$1,335
Debt and Cost of Issuance	\$165,887,163	\$165,887,163	5.09%	\$8,443,359	7.40%	\$624,717	765	\$816
Future Water Projects	\$229,719,561	\$178,901,050	11.47%	\$20,524,394	7.40%	\$1,518,582	765	\$1,984
Professional Expenses	\$12,950	\$12,950	100.00%	\$12,950	100.00%	\$12,950	765	\$17
Total	\$666,873,735	\$616,055,224		\$42,787,047		\$3,177,767		\$4,153

The total fee per ERU is estimated at \$4,153. The impact fee per meter size is illustrated in the **Table 6.2**.

TABLE 6.2: IMPACT FEE PER METER SIZE

Meter Size (In)	ERU Multiplier	Impact Fee per Meter Size	Existing Impact Fee (2013)	% Change
3/4	1.00	\$4,153	\$3,999	3.8%
1	2.00	\$8,305	\$7,998	3.8%
1.5	4.00	\$16,611	\$15,997	3.8%
2	6.40	\$26,577	\$25,595	3.8%
3	15.60	\$64,782		
4	28.60	\$118,767		
6	57.20	\$237,533		
8	113.80	\$472,575		

NON-STANDARD RETAIL WATER IMPACT FEES

The District reserves the right under the Impact Fees Act⁹ to assess an adjusted fee that more closely matches the true impact that the land use will have upon the District’s retail water system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. To determine the impact fee for a non-standard use, the District should use the following formula:

FORMULA FOR NON-STANDARD WATER IMPACT FEES:

$$\text{Estimated Peak Usage (gpm)} / 1.14 \text{ (gpm)} * \$4,153 = \text{Impact Fee}$$

CONSIDERATION OF ALL REVENUE SOURCES

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

⁹ Utah Code 11-36a-402(1)(c)

EXPENDITURE OF IMPACT FEES

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

PROPOSED CREDITS OWED TO DEVELOPMENT

The Impact Fees Act requires that credits be paid back to development for future fees that will pay for growth-driven projects included in the Impact Fee Facilities Plan that would otherwise be paid for through user fees. Credits may be paid to developers who have constructed and donated facilities to the District that are included in the IFFP in-lieu of impact fees. This situation does not apply to developer exactions or improvements required to offset density or as a condition of development. Any project that a developer funds must be included in the IFFP if a credit is to be issued.

In the situation that a developer chooses to construct facilities found in the IFFP in-lieu of impact fees, the decision must be made through negotiation with the developer and the District on a case-by-case basis.

GROWTH-DRIVEN EXTRAORDINARY COSTS

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

SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. An inflation component was used to estimate the capital project costs that are to be constructed beyond Fiscal Year 2019. The analysis includes a **one percent** annual inflation rate on projects that are expected to be constructed after the year 2019. However, these projects have not been incorporated into the calculation of the impact fee.