

# CULINARY WATER IMPACT FEE ANALYSIS (IFA)

## WOODS CROSS CITY



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## IMPACT FEE CERTIFICATION

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### IFA CERTIFICATION

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

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

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

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 If all or a substantial portion of the IFFP or IFA is modified or amended by the City, this certification is no longer valid.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

**LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.**

## SECTION I: EXECUTIVE SUMMARY

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The purpose of the Culinary Water Impact Fee Analysis (“IFA”) is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the “Impact Fees Act,” and help Woods Cross City (the “City”) plan necessary capital improvements for future growth. This document will address the : i) demand created by new development upon the culinary water public facilities, ii) the existing level of service related to the culinary water public facilities that are used to service the City, iii) existing and excess capacity of culinary water improvements, and iv) future culinary water infrastructure needed to serve the City through the next ten years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service (“LOS”). **Woods Cross City Culinary Water Impact Fee Facilities Plan 2014** (the “2014 IFFP”), along with information from the City, provides the information utilized in the analysis for the purposes of calculating impact fees.

- ☞ **Impact Fee Service Area:** The service area for the City’s culinary water impact fees includes all areas within the City and the future declared area around the intersection of Redwood Road and 500 South. The IFFP identifies capital projects that will help to maintain the same level of service enjoyed by existing residents into the future.
- ☞ **Demand Analysis:** The demand units utilized in this analysis equivalent residential units (“ERUs”). As residential and commercial growth occurs within the City, additional ERUs will be generated. The growth in ERUs is expected to reach 6,761 units by 2023, which represents an increase of 1,368 ERUs from 2013. The culinary water capital improvements identified in this study are based on maintaining the current level of service.
- ☞ **Level of Service:** The existing and proposed level of service for the source component is approximately 400 gallons per day (“gpd”) per ERU. The existing and proposed level of service for treatment is that all source water is PCE free. The existing and proposed level of service for storage is 400 gallons per ERU. The distribution level of service is in accordance with the Division of Drinking Water rules regarding flow rate and psi pressures.
- ☞ **Excess Capacity:** Based on the LOS figures above, excess capacity available within the next ten years was calculated for each water component. There is approximately 19 percent excess capacity related to source, 13 percent excess capacity related to the treatment pipeline and building, 19 percent excess capacity related to the Granular Activated Carbon (GAC) treatment component, 14 percent excess capacity related to storage, and 13 percent excess capacity related to the distribution system. The percent of excess capacity, and subsequent value of related improvements, is included in the calculation of the impact fee.
- ☞ **Capital Facilities Analysis:** Due to the projected growth within the City, the total future project cost attributable to new growth within the next ten years equates to **\$1,969,874**. This cost is only related to future distribution projects. While source improvements will likely be constructed in the next ten years to serve buildout demand, the existing system can serve development within the next ten years. Similarly, the excess capacity related to existing storage facilities will serve new demand through the IFFP planning window. Thus, no new source or storage improvements are included in the calculation of the impact fee. As source and storage projects become more imminent, the impact fee analysis should be updated.
- ☞ **Funding of Future Facilities:** This analysis assumes future growth related facilities will be funded through a combination of utility revenues and impact fee revenues.

## PROPOSED CULINARY WATER IMPACT FEE

The tables below illustrate the appropriate buy-in component and the fee associated with projects occurring within the next ten years. The proportionate share analysis determines the proportionate cost assignable to new development based on the amount of excess capacity that will serve future growth within the individual components and based on the proposed capital projects.



TABLE I.1: IMPACT FEE PER ERU

	GROWTH RELATED COSTS WITHIN IFFP HORIZON	ERUS SERVED	FEE PER ERU
Source Excess Capacity	\$307,209	1,368	\$225
Treatment Excess Capacity	\$671,178	1,368	\$491
Storage Excess Capacity	\$1,134,687	1,368	\$829
Distribution Excess Capacity	\$523,255	1,368	\$382
<b>Future Improvements</b>			
Source Future Improvements	\$0	1,368	\$0
Storage Future Improvements	\$0	1,368	\$0
Distribution Future Improvements	\$1,969,874	1,368	\$1,440
<b>Other</b>			
Professional Expense	\$3,788	1,368	\$3
Impact Fee Fund Balance <sup>1</sup>	(\$79,517)	1,368	(\$58)
<b>Total</b>	<b>\$4,530,475</b>		<b>\$3,312</b>

TABLE I.2: IMPACT FEE SCHEDULE

LAND USE TYPE	ERU MULTIPLIER	IMPACT FEE PER UNIT	EXISTING IMPACT FEE	% CHANGE
<b>Residential (per Unit)<sup>2</sup></b>				
Single Family	1.00	\$3,312	\$2,123	56%
Multi-Family	0.75	\$2,484	\$2,123	17%
Land Use Type	ERU Multiplier	Impact Fee per Meter Size	Existing Impact Fee	% Change
<b>Commercial (Meter Size)</b>				
3/4	1.00	\$3,312	\$2,123	56%
1	2.50	\$8,281	\$5,309	56%
1 1/2	5.00	\$16,558	\$10,615	56%
2	8.00	\$26,493	\$16,984	56%
3	15.00	\$49,674	\$31,845	56%
4	25.00	\$82,789	\$53,087	56%

### NON-STANDARD CULINARY WATER IMPACT FEES

The City 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.<sup>3</sup> This adjustment could result in a lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use.

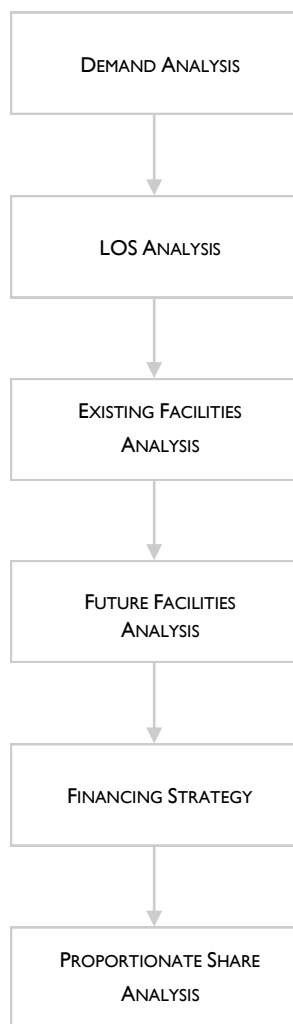
<sup>1</sup> As of September 30, 2014, the impact fee fund balance was \$79,517. This is expected to be spent on projects listed in the IFFP and is thus subtracted from the calculation of the impact fee.

<sup>2</sup> The 2014 IFFP details the difference in water usage between a single family and multi-family unit. The difference in multi-family usage is determined to be 75% of single-family water usage. Thus the multiplier used to calculate the impact fee for multi-family units is 0.75. Specific usage data is described in Section 2.3 and Appendix C of the 2014 IFFP.

<sup>3</sup> 11-36a-402(1)(c)

## SECTION 2: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE METHODOLOGY



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

### DEMAND ANALYSIS

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

### LEVEL OF SERVICE ANALYSIS

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

### EXISTING FACILITY INVENTORY

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

### FUTURE CAPITAL FACILITIES ANALYSIS

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

### FINANCING STRATEGY

This analysis must also include a consideration of all revenue sources, including impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.<sup>4</sup> 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.<sup>5</sup>

<sup>4</sup> 11-36a-302(2)

<sup>5</sup> 11-36a-302(3)



### **PROPORTIONATE SHARE ANALYSIS**

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

DRAFT

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

### SERVICE AREA

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.<sup>6</sup> The 2014 IFFP states the following, “the future projects of this study take into account both the current city boundary and the Annexation Declaration for the City. This future area is near the Legacy Highway and 500 South.”

It is anticipated that the growth projected over the next ten years will impact the City’s existing services. Culinary water infrastructure will need to be expanded in order to maintain the existing level of service. Impact fees have become an ideal mechanism for funding growth-related infrastructure. This analysis is designed to accurately assess the true impact of a particular user upon the City’s infrastructure and prevent existing users from subsidizing new growth. This analysis also ensures that new growth isn’t paying for existing system deficiencies.

### DEMAND UNITS

As shown in Table 3.1, the growth in ERUs is expected to reach 6,761 units by 2023, based on a growth rate of approximately 2.40 percent, as outlined in the 2014 IFFP. This represents an increase of 1,368 ERUs from 2013.

TABLE 3.1: CITY-WIDE ERU GROWTH PROJECTIONS

YEAR	ERUs (BASED ON USAGE)	ADDITIONAL ERUs
2013	5,393	
2023	6,761	1,368

Source: 2014 Culinary Water IFFP, page 5

### LEVEL OF SERVICE STANDARDS

Impact fees cannot be used to finance an increase in the level of service to current or future users of capital improvements. Therefore, it is important to identify the existing and proposed culinary water level of service to ensure that the new capacities of projects financed through impact fees do not exceed the established standard.

#### SOURCE

According to the IFFP, water source requirements are typically defined by the State Division of Drinking Water as 800 gpd/ERU. However, the State recently agreed to a reduced source requirement of 400 gpd/ERU in an effort to better match the actual usage needs for the wells and treatment facilities. Thus, the existing and proposed LOS for the source component is 400 gpd/ERU. This equates to approximately 0.2778 gallons per minute (“gpm”) per ERU.

#### TREATMENT

The 2014 IFFP states the following, “the level of service for the City is that all source water is PCE (perchloroethylene) free.”

#### STORAGE

The 2014 IFFP shows the existing and proposed LOS for the storage component to be 400 gallons/ERU.<sup>7</sup>

#### DISTRIBUTION

The distribution level of service is in accordance with the Division of Drinking Water rules regarding flow rate and psi pressures. These are described in more detail in the 2014 IFFP.

<sup>6</sup> UC 11-36a-402(a)

<sup>7</sup> Based on indoor demand.



## SECTION 4: EXISTING FACILITIES INVENTORY

### EXCESS CAPACITY

The intent of the equity buy-in component is to recover the costs of the unused capacity in existing infrastructure from new development. The calculation of excess capacity is shown in the 2014 IFFP and summarized below. In addition, the tables below calculate the value of excess capacity assuming the existing system value and the percent excess capacity.

#### SOURCE

As shown in Table 3.2 of the 2014 IFFP, current source capacity is 1,961 gpm. Based on the level of service of 400 gpd/ERU (or 0.278 gpm/ERU), current source demand is approximately 1,498 gpm, leaving approximately 463 gpm of excess capacity. Approximately 380 gpm will be used within 10 years which equates to 19 percent of total capacity.

TABLE 4.1: SOURCE EXCESS CAPACITY

	GPM	ERUs SERVED	% OF TOTAL CAPACITY
Total Capacity	1,961	7,060	100%
Current Source Demand (2013)	1,498	5,393	76%
<b>Excess Capacity (2013)</b>	<b>463</b>	<b>1,667</b>	<b>24%</b>
Demand from Future Growth (2013-2023)	380	1,368	19%
<b>Remaining Capacity</b>	<b>83</b>	<b>299</b>	<b>4%</b>
Total Demand at 2023	1,878	6,761	96%

The City has provided a list of all existing source improvements with a useful life of more than 10 years that were paid for by City funds. The total value of these improvements is approximately \$1.5 million. Thus, the excess capacity value used within the next ten years equates to \$307,209.

TABLE 4.2: SOURCE EXCESS CAPACITY VALUE

Existing Source Value	\$1,585,277
% Excess Capacity in IFFP Horizon	19%
<b>Excess Capacity Value (2013-2023)</b>	<b>\$307,209</b>

#### TREATMENT

The City current has capacity in the treatment facility. However, this capacity varies between the pipelines, building and GAC. According to Table 2.5.2 of the 2014 IFFP, the current capacity of the pipelines and building is approximately 3,000 gpm while the capacity of the GAC is 2,000 gpm. The tables below illustrate current demand as well as the calculation of excess capacity used within 10 years. Excess capacity used within 10 years amounts to 13% for the pipeline and building and 19% for the GAC.

TABLE 4.3: TREATMENT PIPELINE AND BUILDING EXCESS CAPACITY

PIPELINES & BUILDING	GPM	ERUs SERVED	% OF TOTAL CAPACITY
Total Capacity	3,000	10,800	100%
Current Treatment Demand (2013)	1,498	5,393	50%
<b>Excess Capacity (2013)</b>	<b>1,502</b>	<b>5,407</b>	<b>50%</b>
Demand from Future Growth (2013-2023)	380	1,368	13%

\*Pipelines, building and equipment (prefilter, chlorinator, etc.) sized for 3,000 gpm.

TABLE 4.4: GAC EXCESS CAPACITY

GAC	GPM	ERUS SERVED	% OF TOTAL CAPACITY
Total Capacity	2,000	7,200	100%
Current Treatment Demand (2013)	1,498	5,393	75%
<b>Excess Capacity (2013)</b>	<b>502</b>	<b>1,807</b>	<b>25%</b>
Demand from Future Growth (2013-2023)	380	1,368	19%

\*GAC currently sized for approx 2,000 gpm because only 2 trains are currently active. Would need 3 trains to reach total capacity of building, pipeline, and other equipment.

The City has bonded for the construction of the treatment facility. The 2014 bond totaled \$4,500,000 and was a zero coupon bond, meaning no interest was included. In addition to the \$4.5 million bond, the City contributed \$481,839 of cash toward the treatment facility. Thus, the total value of the treatment facility is \$4,981,839. Of this cost, \$4,348,539 is related to pipelines and the treatment building, with \$633,300 related to GAC, as shown in the table below. Based on the proportion of excess capacity calculated in Table 4.3 and 4.4 for each component, the excess capacity value used within the next ten years equates to \$671,178.

TABLE 4.5: TREATMENT EXCESS CAPACITY VALUE

	TOTAL ORIGINAL COST	% EXCESS CAPACITY (2013-2023)	VALUE EXCESS CAPACITY
Existing Pipeline and Building Value	\$4,348,539	13%	\$550,844
Existing GAC Value	\$633,300	19%	\$120,333
<b>Total Value Excess Capacity (2013-2023)</b>	<b>\$4,981,839</b>		<b>\$671,178</b>

## STORAGE

As shown in Table 2.5.3 of the 2014 IFFP, current storage capacity is 7,040,000 gallons. However some of this storage capacity is allocated to fire and emergency storage, resulting in total available capacity of 3,910,000 gallons. Based on the level of service of 400 gallons, current storage demand is approximately 2,157,200 gallons, leaving approximately 1,752,800 gallons of excess capacity. Approximately 547,229 gallons will be used within 10 years which equates to 14 percent of total capacity (1,368 new ERCs multiplied by LOS of 400 gallons per ERC).

TABLE 4.6: STORAGE EXCESS CAPACITY

STORAGE EXCESS CAPACITY	GALLONS	ERUS SERVED	% OF TOTAL CAPACITY
Total Capacity	7,040,000		
Less Fire Storage	630,000		
Less Emergency Storage	2,500,000		
Available Total Capacity	3,910,000	9,775	100%
Current Storage Demand (2013)	2,157,200	5,393	55%
<b>Excess Capacity (2013)</b>	<b>1,752,800</b>	<b>4,382</b>	<b>45%</b>
Demand from Future Growth (2013-2023)	547,229	1,368	14%

The City has provided a list of all existing storage improvements with a useful life of more than 10 years that were paid for by City funds. The total value of these improvements is approximately \$6.3 million. Thus, the excess capacity value used within the next ten years equates to \$1,134,687.

TABLE 4.7: STORAGE EXCESS CAPACITY VALUE

	% OF TOTAL VALUE
Existing Storage Value	\$6,349,697
Interest Expense (Outstanding Debt)	\$1,757,739
<b>Total Existing Storage Value</b>	<b>\$8,107,436</b>
Excess Capacity Used (2013-2023)	14%
<b>Excess Capacity Value (2013-2023)</b>	<b>\$1,134,687</b>



## DISTRIBUTION

The table below, which is also shown in the 2014 IFFP, illustrates that current demand is using approximately 53% of the distribution system which amounts to 47% excess capacity. Approximately 13% of the total capacity will be used in the next 10 years.

TABLE 4.8: DISTRIBUTION EXCESS CAPACITY

	YEAR 2013		YEAR 2023		AT-CAPACITY	
Connections	5,393	ERU	6,761	ERU	10,118	ERU
Flow	2,912	gpm	3,636	gpm	5,463	gpm
% of Capacity	53%		67%		100%	
Total Excess Capacity (2013)	47%					
Excess Capacity Used (2013-2023)	13%					

The City has provided a list of all existing distribution improvements with a useful life of more than 10 years that were paid for by City funds. The total value of these improvements is approximately \$4 million. Thus, the excess capacity value used within the next ten years equates to \$523,255.

TABLE 4.9: DISTRIBUTION EXCESS CAPACITY VALUE

Existing Distribution Value	\$3,948,266
% Excess Capacity in IFFP Horizon	13%
<b>Excess Capacity Value (2013-2023)</b>	<b>\$523,255</b>

## MANNER OF FINANCING EXISTING PUBLIC FACILITIES

The City has funded its existing capital infrastructure through a combination of different revenue sources, including general utility fund revenues, the issuance of debt, and grant monies. This analysis has removed all funding that has come from federal grants and donations from non-resident citizens to ensure that none of those infrastructure items are included in the level of service. Included is any interest expense to construct the existing facilities that have excess capacity.

According to the City, the 2008 Water Revenue Bonds were used to fund improvements related to the storage system. The City refinanced these bonds in 2012. The interest cost shown below is included in this analysis as an applicable buy-in component for storage.

TABLE 4.10: DEBT UTILIZED TO FUND EXISTING SYSTEM STORAGE IMPROVEMENTS

Total	Principal	Interest	Total
2008 Water Revenue Bond (Refunded with 2012 Bonds)*	\$714,000	\$748,241	\$1,462,241
2012 Water Revenue Refunding Bond	\$4,632,000	\$1,009,498	\$5,641,498
<b>Total</b>	<b>\$5,346,000</b>	<b>\$1,757,739</b>	<b>\$7,103,739</b>

Source: Woods Cross City, LYRB

\*Includes principal and interest paid prior to refunding.



## SECTION 5: CAPITAL FACILITY ANALYSIS

The estimated costs attributed to new growth are calculated in the 2014 IFFP. Capital projects related to curing existing deficiencies were not included in the calculation of the impact fees. The costs of projects related to curing existing deficiencies cannot be funded through impact fees.

These projects meet the needs of future development within the IFFP horizon and beyond, based on the proposed LOS. Existing source capacity will be sufficient to handle the demand in the next ten years. However, additional source will need to be provided to meet the demand from ERCs after the ten year planning horizon. While the source improvements may need to be constructed in the next ten years, growth estimates suggest it will be toward the latter years of the planning window. Due to the timing of the source improvements, they are not included in this impact fee analysis. As source projects become more imminent, the impact fee analysis should be updated to include these projects.

Similarly, the excess capacity related to existing storage facilities will serve new demand through the IFFP planning window. Thus, no new storage improvements are included in the calculation of the impact fee.

A total of **\$1,969,874** for future distribution improvements is considered impact fee eligible expense within the IFFP horizon. This assumes an annual cost inflation of three percent, which is the historic ENR Construction Index average annual growth rate from 2007 through 2013.

TABLE 5.1: ILLUSTRATION OF CAPITAL IMPROVEMENT COSTS

PROJECT ID	YEAR	PROJECT LOCATION	PROJECT DESCRIPTION	EXISTING DEFICIENCIES	NEW DEVELOPMENT (IFFP HORIZON)	NEW DEVELOPMENT (BEYOND IFFP <sup>8</sup> )	DEVELOPMENT BASE COST (PROJECT IMPROVEMENTS)	TOTAL ESTIMATED COST	NEW DEVELOPMENT IFFP HORIZON	NEW DEVELOPMENT IFFP HORIZON (WITH COST INFLATION)
<b>Future Source</b>										
CW-01	2019	GAC Treatment Plant	Third GAC Train in the building			462,000		462,000	-	-
CW-04	2016	Well #6 below 1100 W	Develop Well w/GAC treatment			99,000		99,000	-	-
	2022	Well #6 below 1100 W	Develop Well w/GAC treatment			3,418,800		3,418,800	-	-
CW-14	2018	Well #7 - 1450 W and 500 S	Develop Well w/GAC treatment			99,000		99,000	-	-
	Beyond 2023	Well #7 - 1450 W and 500 S	Develop Well w/GAC treatment			3,418,800		3,418,800		
<b>Subtotal Future Source</b>				<b>\$0</b>	<b>\$0</b>	<b>\$7,497,600</b>	<b>\$0</b>	<b>\$7,497,600</b>	<b>\$0</b>	<b>\$0</b>
<b>Future Storage</b>										
CW-10	Beyond 2023	1500S Tank site	Construct New 1.5M gal tank			2,401,200		2,401,200		
<b>Subtotal Future Storage</b>				<b>\$0</b>	<b>\$0</b>	<b>\$2,401,200</b>	<b>\$0</b>	<b>\$2,401,200</b>	<b>\$0</b>	<b>\$0</b>
<b>Future Distribution</b>										
CW-02	2018	1100 W - 1500 S to 600 S	12" mainline		509,504			509,504	509,504	573,451
CW-03	2023	1100 W to new Well	Transmission pipe from new well			81,016		81,016	-	
CW-05	2021	1050S from 1200 to 1450	Upsized Main		64,862		204,789	269,651	64,862	79,772
CW-06	2017	1050S from 1450 to Redwood	Upsized Main		79,282		206,824	286,106	79,282	86,634
CW-07	2014	2600S from 1300W to Rdwd	Upsized Main	378,428	231,940			610,368	231,940	231,940
CW-08	2020	Redwood from 2600 to 2000	Upsized Main	295,632	181,194			476,826	181,194	216,355
CW-09	2017	Redwood from 2000 to 1500	Upsized Main	180,888	110,867			291,755	110,867	121,147
CW-11	2016	Mt View Blvd near school	Upsized Main		72,528		189,203	261,731	72,528	76,945
CW-12	2016	Mt View to 500 S	Upsized Main		100,064		261,035	361,099	100,064	106,158

<sup>8</sup>Projects that serve demand beyond 10 year horizon.

PROJECT ID	YEAR	PROJECT LOCATION	PROJECT DESCRIPTION	EXISTING DEFICIENCIES	NEW DEVELOPMENT (IFFP HORIZON)	NEW DEVELOPMENT (BEYOND IFFP <sup>8</sup> )	DEVELOPMENT BASE COST (PROJECT IMPROVEMENTS)	TOTAL ESTIMATED COST	NEW DEVELOPMENT IFFP HORIZON	NEW DEVELOPMENT IFFP HORIZON (WITH COST INFLATION)
CW-13	2015	1800 W and 400 S	Upsized Main and crossing		111,349		430,891	542,240	111,349	114,689
CW-15	2021	1900 South, 1425 W to 1300 W	Upsize Main for Future growth		173,640			173,640	173,640	213,555
CW-16	2018	1500 South, 1250 W to 1100 W	Upsize Main for Future growth	124,332	76,203			200,535	76,203	85,767
CW-17	2019	1450 W - 1000 S to 500 S	Install New 10" Waterline		24,634		149,189	173,823	24,634	28,558
CW-18	2017	450S from Redwood to 1500W	Install New 10" Waterline		31,941		191,647	223,588	31,941	34,903
<b>Subtotal Future Distribution</b>					<b>\$979,280</b>	<b>\$81,016</b>	<b>\$1,633,578</b>	<b>\$4,461,882</b>	<b>\$1,768,008</b>	<b>\$1,969,874</b>
<b>Total</b>					<b>\$979,280</b>	<b>\$9,979,816</b>	<b>\$1,633,578</b>	<b>\$14,360,682</b>	<b>\$1,768,008</b>	<b>\$1,969,874</b>

The IFFP has detailed the projects included in this IFA using capital project and engineering data, planning analysis and other information. The accuracy and correctness of this plan is contingent upon the accuracy of the data and assumptions. Any deviations or changes in the assumptions due to changes in the economy or other relevant information used by the City for this study may cause this plan to be inaccurate and require modifications.

## SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed to provide services to service areas within the community at large.<sup>9</sup> Project improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.<sup>10</sup> To the extent possible, this analysis only includes the costs of system improvements related to new growth within the proportionate share analysis.

## FUNDING OF FUTURE FACILITIES

The IFA 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.<sup>11</sup> 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.<sup>12</sup>

In considering the funding of future facilities, the City has determined the portion of future projects that will be funded by impact fees as growth-related, system improvements. Impact fees are an appropriate funding and repayment mechanism of the growth-related improvements. Where applicable, impact fees will offset the cost of future facilities. However, impact fees cannot be used to fund non-qualified expenses (i.e. to cure existing deficiencies, to raise the level of service, to recoup more than the actual cost of system improvements, or to fund overhead). 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 future capital costs.

<sup>9</sup> UC 11-36a-102(20)

<sup>10</sup> UC 11-36a102(13)

<sup>11</sup> 11-36a-304(2)(c)

<sup>12</sup> 11-36a-302(3)

## **PROPERTY TAX REVENUES**

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

## **GRANTS, DONATIONS AND DEVELOPER CONTRIBUTIONS**

Grants, donations or developer contributions are not currently contemplated in this IFA. However, the impact fees should be adjusted if grant monies are received. New development may be entitled to a reimbursement for any grants or donations received by the City for growth related projects, or for developer funded IFA projects.

## **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 existing level of service. Increases to an existing level of service cannot be funded with impact fee revenues. Analysis is required to accurately assess the true impact of a particular user upon the City infrastructure and to prevent existing users from subsidizing new growth.

## **DEBT FINANCING**

In the event the City has not amassed sufficient impact fees to pay for the construction of time sensitive or urgent capital projects needed to accommodate new growth, the City 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 City to finance and quickly construct infrastructure for new development and reimburse itself later from impact fee revenues for the costs of principal and interest. Currently the City is not planning to issue debt to fund growth related improvements and will utilize a pay-as-you-go approach to funding projects.

## **PROPOSED CREDITS OWED TO DEVELOPMENT**

The Impact Fees Act requires a local political subdivision or private entity to ensure that the impact fee enactment allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer: (a) dedicates land for a system improvement; (b) builds and dedicates some or all of a system improvement; or (c) dedicates a public facility that the local political subdivision or private entity and the developer agree will reduce the need for a system improvement.<sup>13</sup>

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

## **EQUITY OF IMPACT FEES**

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

## **NECESSITY OF IMPACT FEES**

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

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<sup>13</sup> 11-36a-402

## SECTION 6: CULINARY WATER IMPACT FEE CALCULATION

The calculation of impact fees relies upon the information contained in this analysis and in the IFFP. Impact fees are calculated based on many variables centered on proportionality and level of service. The City currently provides culinary water to its residents and businesses. As a result of new growth, the culinary system is in need of expansion to perpetuate the level of service that the City has historically maintained. Section 5 outlines the recommended capital projects that will maintain the established level of service.

### PROPOSED CULINARY WATER IMPACT FEE

#### PLAN BASED (FEE BASED ON DEFINED CIP)

Impact fees can be calculated based on a defined set of costs specified for future development. The improvements are identified in a capital plan as growth related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing level of service and determine any excess capacity in existing facilities that could serve new growth. Impact fees are then calculated based on many variables centered on proportionality share and level of service.

#### CULINARY WATER IMPACT FEE CALCULATION

The tables below illustrate the appropriate buy-in component and the fee associated with projects occurring within the next ten years. The proportionate share analysis determines the proportionate cost assignable to new development based on the amount of excess capacity that will serve future growth within the individual components and based on the proposed capital projects and the estimated ERUs served by the proposed projects.

TABLE 6.1: IMPACT FEE PER ERU

	GROWTH RELATED COSTS WITHIN IFFP HORIZON	ERUS SERVED	FEE PER ERU
Source Excess Capacity	\$307,209	1,368	\$225
Treatment Excess Capacity	\$671,178	1,368	\$491
Storage Excess Capacity	\$1,134,687	1,368	\$829
Distribution Excess Capacity	\$523,255	1,368	\$382
<b>Future Improvements</b>			
Source Future Improvements	\$0	1,368	\$0
Storage Future Improvements	\$0	1,368	\$0
Distribution Future Improvements	\$1,969,874	1,368	\$1,440
<b>Other</b>			
Professional Expense	\$3,788	1,368	\$3
Impact Fee Fund Balance <sup>14</sup>	(\$79,517)	1,368	(\$58)
<b>Total</b>	<b>\$4,530,475</b>		<b>\$3,312</b>

TABLE 6.2: IMPACT FEE SCHEDULE

LAND USE TYPE	ERU MULTIPLIER	IMPACT FEE PER METER SIZE	EXISTING IMPACT FEE	% CHANGE
<b>Residential (per Unit)<sup>15</sup></b>				
Single Family	1.00	\$3,312	\$2,123	56%
Multi-Family	0.75	\$2,484	\$2,123	17%
<b>Commercial (Meter Size)</b>				
3/4	1.00	\$3,312	\$2,123	56%
1	2.50	\$8,281	\$5,309	56%
1 1/2	5.00	\$16,558	\$10,615	56%
2	8.00	\$26,493	\$16,984	56%
3	15.00	\$49,674	\$31,845	56%
4	25.00	\$82,789	\$53,087	56%

<sup>14</sup> As of September 30, 2014, the impact fee fund balance was \$79,517. This is expected to be spent on projects listed in the IFFP and is thus subtracted from the calculation of the impact fee.

<sup>15</sup> The 2014 IFFP details the difference in water usage between a single family and multi-family unit. The difference in multi-family usage is determined to be 75% of single-family water usage. Thus the multiplier used to calculate the impact fee for multi-family units is 0.75. Specific usage data is described in Section 2.3 and Appendix C of the 2014 IFFP.



### **NON-STANDARD CULINARY WATER IMPACT FEES**

The City 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.<sup>16</sup> This adjustment could result in a lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use.

### **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.

### **EXPENDITURE OF IMPACT FEES**

Legislation requires that impact fees should be spent or encumbered with 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.

### **GROWTH-DRIVEN EXTRAORDINARY COSTS**

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

### **SUMMARY OF TIME PRICE DIFFERENTIAL**

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. An inflation component of three percent per year is applied to each project based on its construction year. The City has also included the interest cost associated with its outstanding bonds.

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<sup>16</sup> 11-36a-402(1)(c)