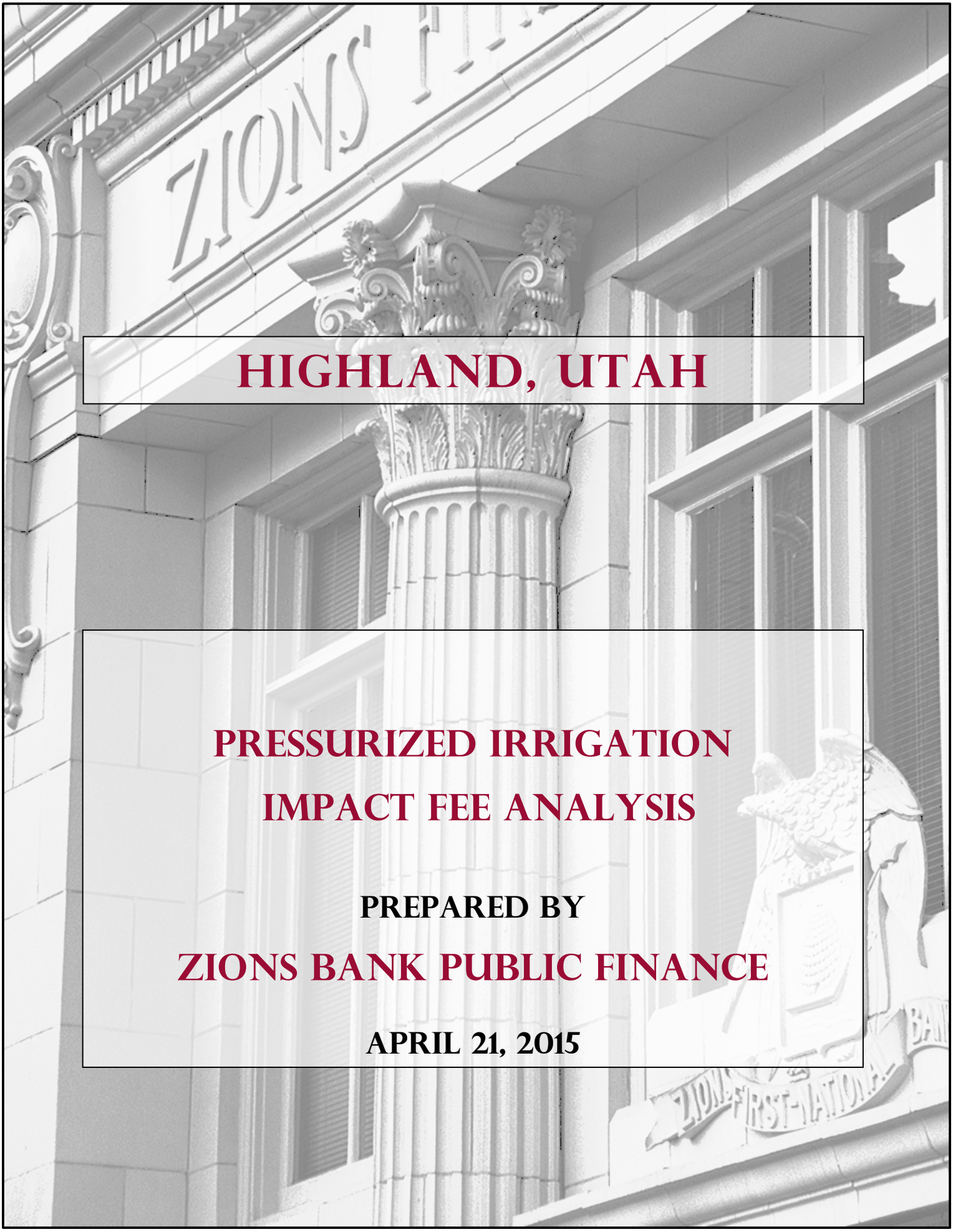


HIGHLAND, UTAH

PRESSURIZED IRRIGATION IMPACT FEE ANALYSIS

PREPARED BY

ZIONS BANK PUBLIC FINANCE

APRIL 21, 2015

CONTENTS

EXECUTIVE SUMMARY

Zions Bank Public Finance (Zions) is pleased to provide Highland City (the City) with an update to the pressurized irrigation system (PI) impact fee. The following pages summarize the document and tables included. The intent is to provide a concise discussion of the calculation and identification of the maximum legal impact fee.

Growth Projections of Irrigated Acres

Population is important to impact fee and facility planning as population, and other factors, drive project needs and timings however, the City's increases in irrigated acres determines the sizing and future expansions of the pressurized irrigation system. The primary measurements of demand in this analysis are irrigated acres which are found by multiplying the total acres served by an average 38% percent of the total lot irrigated. Currently, the City had 4,198 total acres served and by 2024 it is anticipated that the City will grow to 4,841 total acres served. This results in 1,594 irrigated acres in the City today which will grow to 1,838 irrigated acres in the years.

Level of Service Definitions

The pressurized irrigation level of service per irrigated acre is defined as:

- Peak Day Demand (gpm) per Irrigated Acre: 5.29
- Instantaneous Demand (gpm) per Irrigated Acre: 12.74
- Storage per Irrigated Acre: 8,500

CALCULATED FEE

The impact fee is calculated by multiplying the impact fee per irrigated acre of $9,328.06 as found in Figure ES.1 by the irrigable acreage associated with different lot sizes found within Highland City. The final impact fees according to lot size are shown in Figure ES.2.

FIGURE ES.1: PRESSURIZED IRRIGATION FEE BY IRRIGATED ACRE

Component	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (Acres)	Cost per Acre
Storage Impact Fee					
Future 10 Year Capital Projects	$ 2,624,076	33%	$ 858,789	244	$ 3,520
Future Storage Related Debt to be Issued - INTEREST ONLY	346,019	33%	113,243	244	464
Existing Storage Projects	9,877,766	8.54%	844,026	244	3,459
Existing Storage Related Debt - INTEREST ONLY	1,037,588	8.54%	88,659	244	363
Storage Subtotal	**$ 13,885,449**		**$ 1,904,716**		**$ 7,806.21**
Distribution Impact Fee					
Future 10 Year Capital Projects	$ 664,769	24.80%	$ 164,830	244	$ 676
Future Distribution Related Debt to be Issued - INTEREST ONLY	190,621	24.80%	47,265	244	194
Existing Distribution Projects	1,770,947	5.59%	98,995	244	406
Existing Distribution Related Debt - INTEREST ONLY	215,398	5.59%	12,041	244	49
Distribution Subtotal	**$ 2,841,735**		**$ 323,131**		**$ 1,324.31**
Other Impact Fee					
Future 10 Year Capital Projects	$ 48,200	100%	$ 48,200	244	$ 198
Future Other Related Debt to be Issued - INTEREST ONLY	-	100%	-	244	-
Existing Other Projects	-	0.00%	-	244	-
Existing Other Related Debt - INTEREST ONLY	-	0.00%	-	244	-
Other Subtotal	**$ 48,200**		**$ 48,200**		**$ 197.54**
Professional Services/ Credits					
Unspent Impact Fee Funds	-	0.00%	$ -	244	$ -
Professional Services/ Credits	-	0%	-	244	-
Professional Services/Credits Subtotal	**-**		**-**		**-**
Total Impact Fee Per Acre	**$ 16,775,384**		**$ 2,276,047**		**$ 9,328.06**

FIGURE ES.2: HIGHLAND PRESSURIZED IRRIGATION FEE BY LOT SIZE

Lot Size	Acreage	% Irrigable	Proposed Fee
1/4 Acres	0.25	0.38	$ 886
1/2 Acres	0.5	0.38	1,772
3/4 Acres	0.75	0.38	2,658
1 Acres	1	0.38	3,545
1 1/2 Acres	1.5	0.38	5,317

FIGURE ES.3: NON-STANDARD FEE CALCULATION

Non-Standard Users Impact Fee Formula
Step 1: Identify Estimated Total Acreage of Proposed Development
Step 2: Multiply Total Acreage by the Percentage to be Irrigated
Step 3: Multiply Irrigated Acreage by Impact Fee per Acre of $9,328.06

An example of a non-standard impact fee calculation would be a multi-family complex that has a common area that includes 3,000 irrigable square feet. To calculate the fee, divide 3,000 by 43,560 to calculate the percent of an irrigable acre (3000/43560 = 6.8% of an irrigable acre). Then multiply the 6.8% by the cost per irrigable acre ($9,328.06) which will result in the impact fee of $642.43 for that particular development (6.8% x $9,328.06 = $642.43).

CHAPTER 1: PROJECT OVERVIEW

Highland City realizes that its rapid growth as well as changes to the Impact Fees Act require updates and review of its impact fees as well as its facility planning. A Pressurized Irrigation Impact Fee Facilities Plan was developed by Hansen Allen & Luce Engineers (Engineers) and will be adopted with this document. The following analysis has been created using the Highland City Water Impact Fee Facilities Plan, Zions Bank Public Finance and City staff provided information.

The goal of the Impact Fee Analysis is to calculate the maximum impact fee that may be assessed to new development and ensure the fee meets the requirements of the Impact Fees Act, Utah Code 11-36a-101 *et seq*. The sections and subsections of the Impact Fee Analysis will directly address the following items, required by the code:

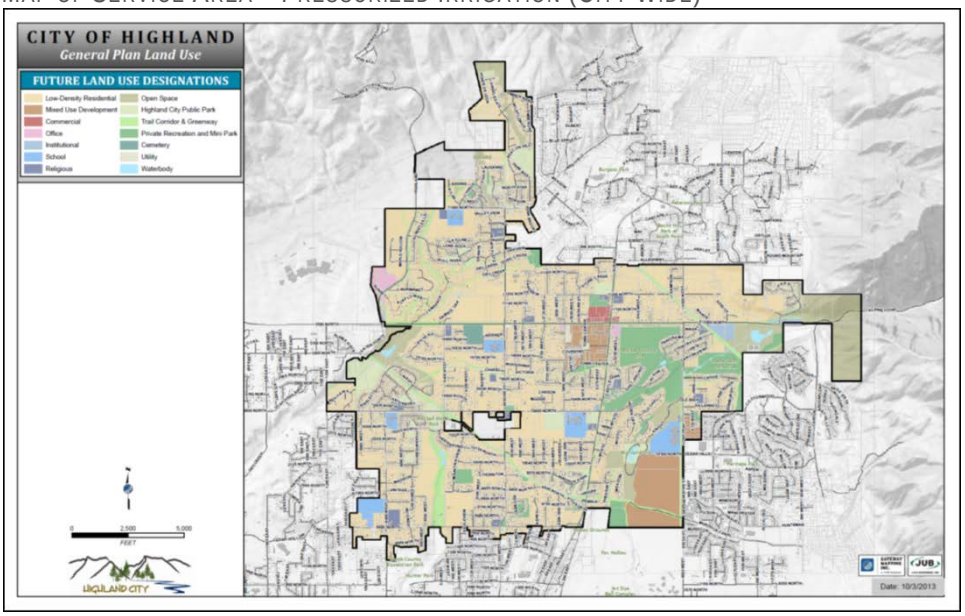
- Impact Fee Analysis Requirements (Utah Code 11-36a-304)
    - Identify Existing Capacity to serve growth
        - Proportionate Share Analysis
    - Identify the level of service
    - Identify the impact of future development on exisitng and future improvements
- Calculated Fee (Utah Code 11-36a-305)
- Certification (Utah Code 11-36a-306)

SERVICE AREA

Highland City is located on a bench near American Fork, Lehi and Alpine cities in northern Utah County. The City's pressurized irrigation system provides service to approximately 17,093 residents and relies on eight different sources for its water. Construction on the City's PI system began in 1997.

This Impact Fee Analysis calculates the base impact fees for one City-wide Service Area for pressurized irrigation. A map of the service area is included below.

FIGURE 1: MAP OF SERVICE AREA – PRESSURIZED IRRIGATION (CITY WIDE)



Growth Projections

Population is important to impact fee and facility planning as population, and other factors, drive project needs and timings however, the City's increases in irrigated acres determines the sizing and future expansions of the pressurized irrigation system. The primary measurements of demand in this analysis are irrigated acres which are found by multiplying the total acres served by an average 38% percent of the total lot irrigated. Currently, the City had 4,198 total acres served and by 2024 it is anticipated that the City will grow to 4,841 total acres served. This results in 1,594 irrigated acres in the City today which will grow to 1,838 irrigated acres in the years.

FIGURE 2: POPULATION GROWTH

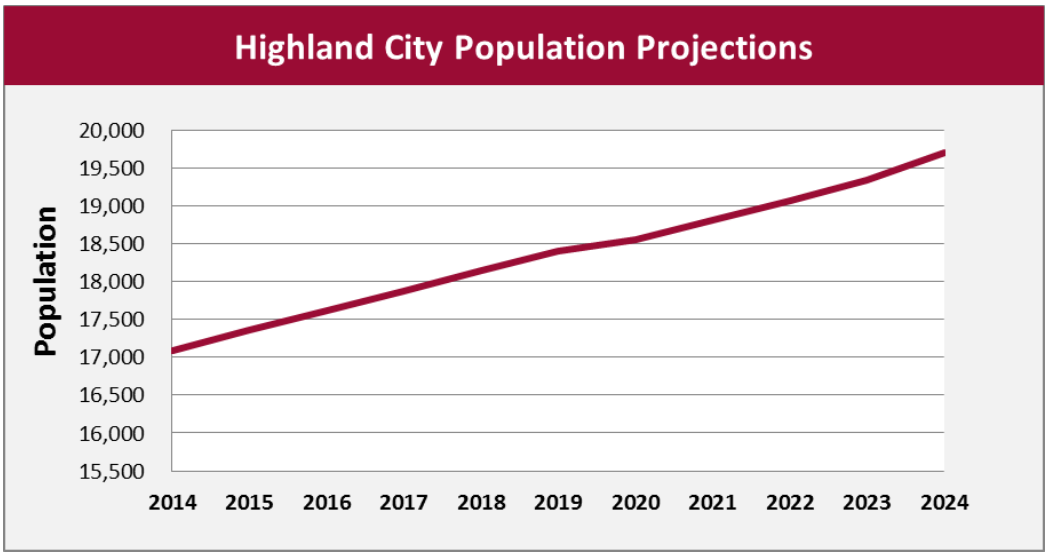


FIGURE 3: GROWTH IN TOTAL ACRES SERVED AND IRRIGATED ACRES

Year	Population	Growth in Total Acres	Irrigated Acres
2014	**17,093**	**4,198**	**1,594**
2015	17,355	4,258	1,618
2016	17,617	4,317	1,641
2017	17,879	4,377	1,663
2018	18,141	4,437	1,686
2019	18,403	4,496	1,709
2020	18,551	4,556	1,730
2021	18,813	4,627	1,758
2022	19,075	4,699	1,785
2023	19,337	4,770	1,813
2024	**19,713**	**4,841**	**1,838**
Buildout	**30,547**	**6,840**	**2,564**

There is modest growth still expected in Highland. Growth in population and in acreage to be irrigated will place increasing demand on the pressurized irrigation system. The Impact Fee Facilities Plan defines the improvements

that are required to maintain the current system and meet the needs of future growth. As the table above shows, growth in irrigated acreage is still occurring and the City must keep up with demand.

The Impact Fee Facilities Plan clearly shows the impact and consumption of current and future users of the pressurized irrigation system. The plan details the existing volumes of the components of the system, as well as the difference between what is used by existing and future users.

LEVEL OF SERVICE DEFINITIONS

The Impact Fee Facilities Plan has defined the current level of service in Highland City as:

The pressurized irrigation level of service per irrigated acre is defined as:

- Peak Day Demand (gpm) per Irrigated Acre: 5.29
- Instantaneous Demand (gpm) per Irrigated Acre: 12.74
- Storage per Irrigated Acre: 8,500

CHAPTER 2: EXISTING AND FUTURE CAPITAL PROJECTS

EXISTING INFRASTRUCTURE AND CAPACITY TO SERVE NEW GROWTH (BUY-IN COMPONENT)

As mentioned, much of the pressurized irrigation system has been constructed with bonds. The City provided a list of the projects funded. Hansen Allen & Luce completed an analysis to identify the capacity of the bond funded projects by functional component that will serve new growth. The components of the system (storage and distribution) have been analyzed separately and have their own levels of service and future capacities. Actual water rights and shares are provided to the City at the time of development so there are no source related impact fee qualifying projects to consider at this time.

Storage

The total PI storage capacity is 50.4 Acre Feet. All ponds were constructed since 1997 and are in good condition. The Upper/Lower ponds do not have excess capacity and, given that the City has planned some pond expansion projects, the Northwest pond will have sufficient excess capacity to serve the City through buildout. During the impact fee horizon projects to increase the capacity of the Upper and Lower ponds to serve future growth have been included in the impact fee calculation.

Distribution

The City's pressurized irrigation system consists of pipes ranging from 4" to 30". The majority of the pipes are 8" pipes. All pipes within the system have been constructed since 1997 and are in good condition with capacity to serve growth through buildout.

IMPACT FEE FACILITIES PLAN – FUTURE CAPITAL PROJECTS

Hansen Allen & Luce has carefully reviewed the City's existing PI system and has identified several projects that need to be constructed within the 10 year planning horizon. These projects will ensure the pressurized irrigation system has the capacity to meet growth needs and were adapted by HAL from the City's 2009 Master Plan. The table below summarizes the cost for each project and identifies the portion that can be attributable to 10 year growth.

FIGURE 4: FUTURE CAPITAL PROJECTS

Project Name	Year to be Constructed	2014 Cost	Construction Cost with Inflation	% to Existing / Project Level	% Impact Fee Qualifying - 10 Year	% Impact Fee Qualifying - Beyond 10 Year	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non Impact Fee Qualifying
Storage									
Upper Pond Expansion (11.5 AC-ft)	2020	$ 1,437,500	$ 1,828,901	0%	39%	61%	$ 715,657	$ 1,113,244	$ -
Lower Pond Expansion (5 AC-ft)	2020	625,000	795,175	82%	18%	0%	143,131	-	652,043
Storage Subtotal		**$ 2,062,500**	**$ 2,624,076**				**$ 858,789**	**$ 1,113,244**	**$ 652,043**
Distribution									
MP #13 Connection	2020	$ 249,953	$ 318,009	0.0%	24.8%	75.2%	$ 78,851	$ 239,158	$ -
MP #12 PRV and WL	2020	272,550	346,760	0.0%	24.8%	75.2%	85,980	260,780	-
Distribution Subtotal		**$ 522,503**	**$ 664,769**				**$ 164,830**	**$ 499,939**	**$ -**
Other- Professional Services									
Impact Fee Facilities Plan	2015	$ 9,995	$ 10,707	0.0%	100.0%	0.0%	$ 10,707	$ -	$ -
Master Plan	2015	30,000	32,137	0.0%	100.0%	0.0%	32,137	-	-
Impact Fee Analysis	2015	5,000	5,356	0.0%	100.0%	0.0%	5,356	-	-
Other Subtotal		**$ 44,995**	**$ 48,200**				**$ 48,200**	**$ -**	**$ -**
Ten Year Total		**$ 2,629,998**	**$ 3,337,045**				**$ 1,071,819**	**$ 1,613,183**	**$ 652,043**

FINANCE MECHANISMS

Outstanding Debt

The Utah Impact Fees Act does allow for the inclusion of outstanding principal and interest costs of existing improvements funding by bond proceeds that still have capacity to serve new growth. Currently, the City has one outstanding debt issue related to the PI system, the 2009 Revenue Refunding Bonds. The 2009 bonds refunded the 1998 revenue refunding bonds which had been issued to refund the original 1996 debt issue. The 1996 debt issue was used to fund the construction of the City's pressurized irrigation system. Approximately 9% of the 2009 bond bend relates to the storage system and 6% to distribution. Those portions of the cost have been included in the impact fee calculation.

It should be noted that the City had a note to Provo River Water Users Association and an assessment to the Highland Water Conservancy District outstanding both related to the Provo river water canal enclosure project. Both the note and the assessment are paid for by the City's General Fund and are not funded with pressurized irrigation user rates or impact fees. Therefore, at this time, it is not necessary to consider this outstanding debt when calculating the pressurized irrigation impact fee.

Future Debt

In order to fund the future projects needed in the 10 year horizon, a future bond issue is anticipated in approximately 2020. The bond is expected to be issued for approximately $1.5M as shown in Figure 5. Approximately 31% of this bond will serve ten year growth in demand and has been included in the impact fee calculation.

FIGURE 5: 2020 PRESSURIZED IRRIGATION REVENUE BOND

	Principal	Interest	Total D/S	
2021	$77,000	$ 61,480	$ 138,480	**2021**
2022	80,000	58,400	138,400	**2022**
2023	83,000	55,200	138,200	**2023**
2024	86,000	51,880	137,880	**2024**
2025	90,000	48,440	138,440	**2025**
2026	93,000	44,840	137,840	**2026**
2027	97,000	41,120	138,120	**2027**
2028	101,000	37,240	138,240	**2028**
2029	105,000	33,200	138,200	**2029**
2030	109,000	29,000	138,000	**2030**
2031	114,000	24,640	138,640	**2031**
2032	118,000	20,080	138,080	**2032**
2033	123,000	15,360	138,360	**2033**
2034	128,000	10,440	138,440	**2034**
2035	133,000	5,320	138,320	**2035**
Total	**$ 1,537,000**	**$ 536,640**	**$ 2,073,640**	

CHAPTER 3: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that an impact fee analysis estimate the proportionate share of the costs for existing capacity that will be recouped; and the costs of impacts on system improvements that are reasonably related to the new development activity.

Highland must keep up with growing demand and must begin building infrastructure in order to support growth and economic development in the area. The IFFP clearly defines what projects are growth related, repair and replacement, or pipe upsizing (the upsizing may include some element of growth). The projects are detailed later in the Future Capital Projects section.

Part of the proportionate share analysis is a consideration of the manner of funding existing public facilities. Historically the City has funded existing infrastructure through several different funding sources including:

- General Fund Revenues
- User Fees
- Grants
- Bond Proceeds
- Developer Exactions
- Impact Fees

In calculating the buy-in (for existing infrastructure capacity) component of this analysis no grant funded infrastructure has been included. The infrastructure included in the analysis was all bond funded projects. Bond funded projects are impact fee eligible expenses. In order to ensure fairness to existing users, impact fees are an appropriate means of funding future capital infrastructure because using impact fees places a burden on future users that is equal to the burden that was borne in the past by existing users. (Utah Impact Fees Act, 11-36a-304(2) (c) (d))

Just as the existing infrastructure was funded through different means it is required by the Impact Fees Act to evaluate all means of funding future capital. There are positive and negative aspects to the various forms of funding. It is important to evaluate each.

General Fund/User Rates

The general fund and user rates have both been funded in one form or another by existing users. It would be an additional burden to existing users to use this revenue source to fund future capital to meet the needs of future users. This is not an equitable policy and can place too much stress on the tight budgets of the general fund and other user rate funds.

Bond Proceeds

Based on lack of impact fee reserves and cash funding available for the projects needed for the future, the City anticipates issuing debt for capital projects. It is important to note that it is anticipated the impact fees will fund the eligible portions of the proposed debt.

Impact Fees

Impact fees are a fair and equitable means of providing infrastructure for future development. They provide a rational nexus between the costs borne in the past and the costs required in the future. The Impact Fees Act ensures that

future development is not paying any more than what future growth will demand. Existing users and future users receive equal treatment; therefore impact fees are the optimal funding mechanism for future growth related capital needs.

Developer Credits

If projects 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) are constructed by developers, that developer is entitled to a credit against impact fees owed. (Utah Impact Fees Act, 11-36a-304(2) (f)).

Other

In this particular analysis, there is also a credit for unspent impact fee revenues collected in the past. The current impact fee fund balance will be credited against the impact fee, if applicable.

CALCULATED FEE

The impact fees have been calculated with all the above considerations for a City-Wide PI Service Area. The fee per irrigated acre is $9,328. The table below calculates the impact fee according to various lot sizes given the fee per irrigated acre and an average irrigable area of 38% of the total lot size.

FIGURE 6: HIGHLAND PRESSURIZED IRRIGATION IMPACT FEE BY LOT SIZE

Lot Size	Acreage	% Irrigable	Proposed Fee
1/4 Acres	0.25	0.38	$ 886
1/2 Acres	0.5	0.38	1,772
3/4 Acres	0.75	0.38	2,658
1 Acres	1	0.38	3,545
1 1/2 Acres	1.5	0.38	5,317

At the City's discretion a non-standard impact fee may be calculated for a particular development that does not fit the typical calculation of lot size and irrigable area shown above. The steps to calculate a non-standard impact fee are included in the table below and an example of how to use the non-standard formula is described in the following paragraph.

FIGURE 7: NON-STANDARD FEE CALCULATION

Non-Standard Users Impact Fee Formula
Step 1: Identify Estimated Total Acreage of Proposed Development
Step 2: Multiply Total Acreage by the Percentage to be Irrigated
Step 3: Multiply Irrigated Acreage by Impact Fee per Acre of $9,328.06

An example of a non-standard impact fee calculation would be a multi-family complex that has a common area that includes 3,000 irrigable square feet. To calculate the fee, divide 3,000 by 43,560 to calculate the percent of an irrigable acre (3000/43560 = 6.8% of an irrigable acre). Then multiply the 6.8% by the cost per irrigable acre ($9,328.06) which will result in the impact fee of $642.43 for that particular development (6.8% x $9,328.06 = $642.43).

In accordance with Utah Code Annotated, 11-36a-306(2), Zions Bank Public Finance (Zions) makes the following certification:

Zions certifies that the attached impact fee analysis:

1. includes only the cost of public facilities that are:

    a. allowed under the Impact Fees Act; and

    b. actually incurred; or

    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;

2. does not include:

    a. costs of operation and maintenance of public facilities;

    b. cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;

    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;

3. offset costs with grants or other alternate sources of payment; and

4. complies in each and every relevant respect with the Impact Fees Act.

Zions Bank Public Finance makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plans (IFFPs) made in the IFFP documents or in the impact fee analysis documents are followed in their entirety by Highland City staff and elected officials.
2. If all or a portion of the IFFPs or impact fee analyses are modified or amended, this certification is no longer valid.
3. All information provided to Zions Bank Public Finance, its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by Highland City and outside sources. Copies of letters requesting data are included as appendices to the IFFPs and the impact fee analysis.

Dated: April 21, 2015

ZIONS BANK PUBLIC FINANCE

APPENDICES

Notice Date & Time: September 11, 2014 | 7:00 AM - 11:59 PM
Description/Agenda: Notice Title: Notice of Intent to Create Impact Fee Facilities Plans and Amended Impact Fee Written Analyses

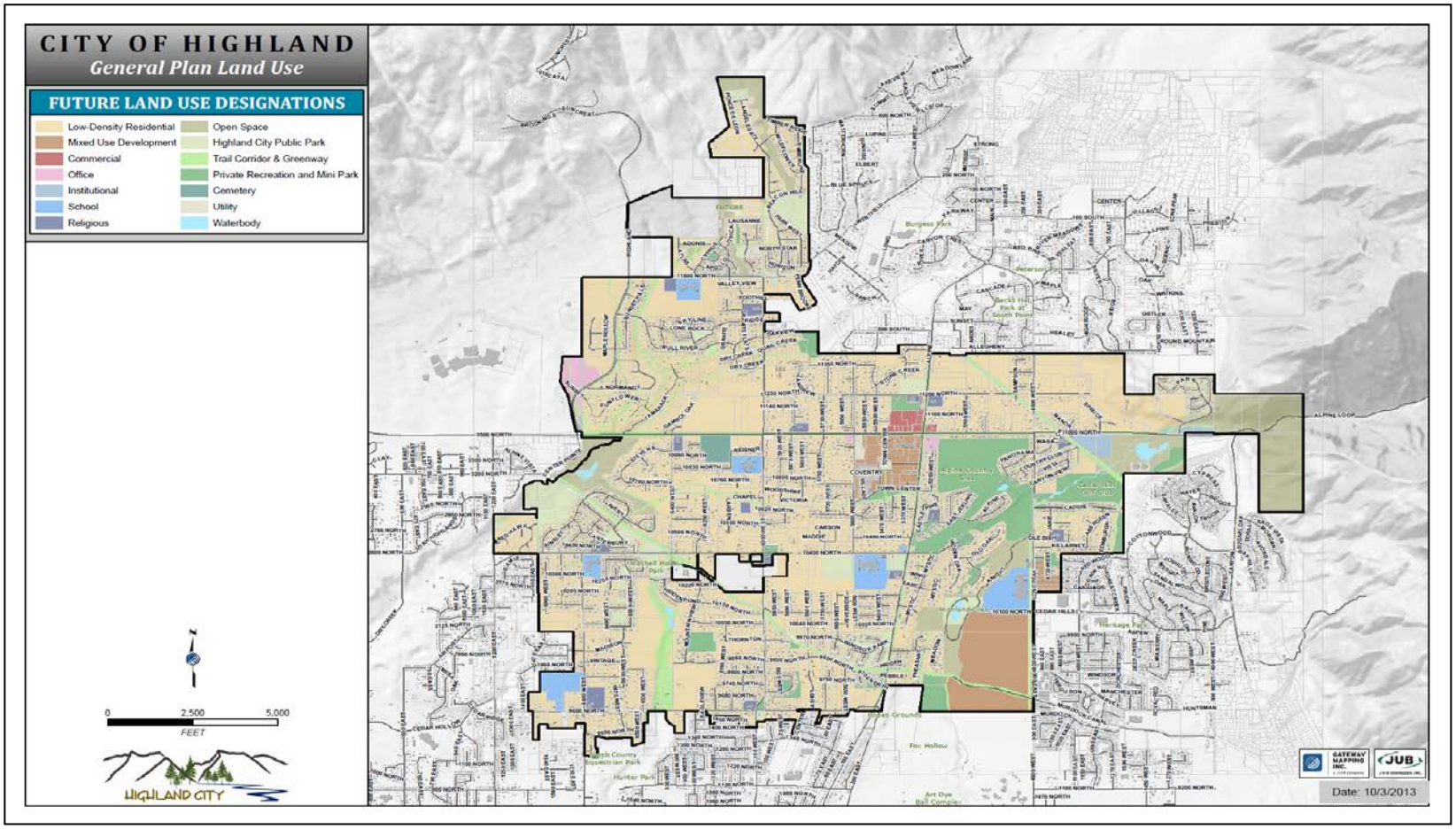
NOTICE OF INTENT TO CREATE IMPACT FEE FACILITIES PLANS AND AMENDED IMPACT FEE WRITTEN
ANALYSES

Highland City, a municipality of the State of Utah, located in Utah County, Utah intends to commence the preparation of independent and comprehensive Impact Fee Facilities Plans and Written Impact Fee Analyses for the services of secondary water, sanitary sewer, parks, recreation and trails, roads and public safety. Therefore, pursuant to the provisions of 11-36a-501 and 503 of the Utah Code, as amended 2011, notice is hereby provided to you of the intent of Highland City to create an Impact Fee Facilities Plans and amend Highland City's Impact Fee Written Analyses. The location(s) that will be included in the Impact Fee Facilities Plans and Impact Fee Analyses are all areas within the legal Highland City limits and the declared annexation areas of Highland City.

BY ORDER OF THE CITY COUNCIL OF HIGHLAND CITY

Public Notice Website http://www.utah.gov/pmn/sitemap/notice/231435.html

APPENDIX A: MAP OF IMPACT FEE SERVICE AREA



Appendix B: Peak Day Demand Projections for Secondary Water

CURRENT AND FUTURE ACRES FOR THE SECONDARY WATER SERVICE AREA

TABLE B.1: CURRENT AND FUTURE SECONDARY WATER ACRES

Year	Population	Growth in Total Acres	Irrigated Acres
2014	**17,093**	**4,198**	**1,594**
2015	17,355	4,258	1,618
2016	17,617	4,317	1,641
2017	17,879	4,377	1,663
2018	18,141	4,437	1,686
2019	18,403	4,496	1,709
2020	18,551	4,556	1,730
2021	18,813	4,627	1,758
2022	19,075	4,699	1,785
2023	19,337	4,770	1,813
2024	**19,713**	**4,841**	**1,838**
Buildout	**30,547**	**6,840**	**2,564**

TABLE B.2: SECONDARY WATER DEMAND

Secondary Water Acres	
Current Irrigated Acres	1,594
Buildout Irrigated Acres	2,564
Total Undeveloped Irrigated Acres	970
% Undeveloped	38%
10 Year Additional Irrigated Acres	**244**

APPENDIX C: PRESSURIZED IRRIGATION 10 YEAR CAPITAL PROJECTS

TABLE C.1: SECONDARY WATER CAPITAL PROJECTS — **Inflation Rate*** 3.5%

Project Name	Year to be Constructed	2014 Cost	Construction Cost with Inflation	% to Existing / Project Level	% Impact Fee Qualifying - 10 Year	% Impact Fee Qualifying - Beyond 10 Year	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non Impact Fee Qualifying
Storage									
Upper Pond Expansion (11.5 AC-ft)	2020	$ 1,437,500	$ 1,828,901	0%	39%	61%	$ 715,657	$ 1,113,244	$ -
Lower Pond Expansion (5 AC-ft)	2020	625,000	795,175	82%	18%	0%	143,131	-	652,043
Storage Subtotal		**$ 2,062,500**	**$ 2,624,076**				**$ 858,789**	**$ 1,113,244**	**$ 652,043**
Distribution									
MP #13 Connection	2020	$ 249,953	$ 318,009	0.0%	24.8%	75.2%	$ 78,851	$ 239,158	$ -
MP #12 PRV and WL	2020	272,550	346,760	0.0%	24.8%	75.2%	85,980	260,780	-
Distribution Subtotal		**$ 522,503**	**$ 664,769**				**$ 164,830**	**$ 499,939**	**$ -**
Other- Professional Services									
Impact Fee Facilities Plan	2015	$ 9,995	$ 10,707	0.0%	100.0%	0.0%	$ 10,707	$ -	$ -
Master Plan	2015	30,000	32,137	0.0%	100.0%	0.0%	32,137	-	-
Impact Fee Analysis	2015	5,000	5,356	0.0%	100.0%	0.0%	5,356	-	-
Other Subtotal		**$ 44,995**	**$ 48,200**				**$ 48,200**	**$ -**	**$ -**
Ten Year Total		**$ 2,629,998**	**$ 3,337,045**				**$ 1,071,819**	**$ 1,613,183**	**$ 652,043**

Table C.2: Total Capital Projects by Year

Project	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Storage											
Upper Pond Expansion (11.5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,828,901	$ -	$ -	$ -
Lower Pond Expansion (5 AC-ft)	-	-	-	-	-	-	-	795,175	-	-	-
Storage Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 795,175	$ -	$ -	$ -
Distribution											
MP #13 Connection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 318,009	$ -	$ -	$ -
MP #12 PRV and WL	-	-	-	-	-	-	-	346,760	-	-	-
Distribution Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 664,769	$ -	$ -	$ -
Other- Professional Services											
Impact Fee Facilities Plan	$ -	$ -	$ 10,707	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Master Plan	-	-	32,137	-	-	-	-	-	-	-	-
Impact Fee Analysis	-	-	5,356	-	-	-	-	-	-	-	-
Other Subtotal	$ -	$ -	$ 48,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capital Projects	**$ -**	**$ -**	**$ 48,200**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,459,944**	**$ -**	**$ -**	**$ -**

Table C.3: Impact Fee Qualifying Capital Projects WITHIN TEN YEARS by Year

Project	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Storage											
Upper Pond Expansion (11.5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 715,657	$ -	$ -	$ -
Lower Pond Expansion (5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 143,131	$ -	$ -	$ -
Storage Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 143,131	$ -	$ -	$ -
Treatment											
MP #13 Connection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 78,851	$ -	$ -	$ -
MP #12 PRV and WL	-	-	-	-	-	-	-	85,980	-	-	-
Distribution Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 78,851	$ -	$ -	$ -
Other- Professional Services											
Impact Fee Facilities Plan	$ -	$ -	$ 10,707	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Master Plan	-	-	32,137	-	-	-	-	-	-	-	-
Impact Fee Analysis	-	-	5,356	-	-	-	-	-	-	-	-
Other Subtotal	$ -	$ -	$ 48,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Impact Fee Qualifying - 10 Year Grov	**$ -**	**$ -**	**$ 48,200**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 221,982**	**$ -**	**$ -**	**$ -**

Table C.4: Impact Fee Qualifying Capital Projects BEYOND TEN YEARS by Year

Project	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Storage											
Upper Pond Expansion (11.5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,113,244	$ -	$ -	$ -
Lower Pond Expansion (5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Storage Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,113,244	$ -	$ -	$ -
Distribution											
MP #13 Connection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 239,158	$ -	$ -	$ -
MP #12 PRV and WL	-	-	-	-	-	-	-	260,780	-	-	-
Distribution Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 239,158	$ -	$ -	$ -
Other- Professional Services											
Impact Fee Facilities Plan	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Master Plan	-	-	-	-	-	-	-	-	-	-	-
Impact Fee Analysis	-	-	-	-	-	-	-	-	-	-	-
Other Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Impact Fee Qualifying - Beyond Ten	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,352,403**	**$ -**	**$ -**	**$ -**

Table C.5: Non Impact Fee Qualifying Capital Projects by Year

Project	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Storage											
Upper Pond Expansion (11.5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Lower Pond Expansion (5 AC-ft)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 652,043	$ -	$ -	$ -
Storage Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 652,043	$ -	$ -	$ -
Distribution											
MP #13 Connection	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
MP #12 PRV and WL	-	-	-	-	-	-	-	-	-	-	-
Distribution Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other- Professional Services											
Impact Fee Facilities Plan	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Master Plan	-	-	-	-	-	-	-	-	-	-	-
Impact Fee Analysis	-	-	-	-	-	-	-	-	-	-	-
Other Subtotal	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Non Impact Fee Qualifying	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 652,043**	**$ -**	**$ -**	**$ -**

Appendix D: Historic Asset Data

Table D.1: Historic Asset Data Summary

System	Storage	Distribution	Other	Total Cost
NW Pond	$ 587,468			$ 587,468
11800 PS & Well		1,427,049		1,427,049
Lower PS		206,336		206,336
Hogs Hollow PS	231,556			231,556
System Less Upper Pond	8,460,271			8,460,271
Upper Pond (No Capacity)	598,471			598,471
18" Transmission Line		137,562		137,562
Totals	**$ 9,877,766**	**$ 1,770,947**	**$ -**	**$ 11,648,713**

Table D.2: Storage Historic Asset Data Summary

System	% to Existing / Project Level	% Impact Fee Qualifying - 10 Year	% Impact Fee Qualifying - Beyond 10 Year	Total Cost	Existing / Non-Qualifying Cost	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years
NW Pond	32%	5%	63%	$ 587,468	$ 190,281	$ 29,173	$ 368,014
System Less Upper Pond	62%	9%	29%	8,460,271	5,253,724	795,068	2,411,479
Upper Pond (No Capacity)	100%	0%	0%	598,471	598,471	-	-
Totals				**$ 9,646,210**	**$ 6,042,476**	**$ 824,241**	**$ 2,779,494**

Table D.3: Distribution Historic Asset Data Summary

System	% to Existing / Project Level	% Impact Fee Qualifying - 10 Year	% Impact Fee Qualifying - Beyond 10 Year	Total Cost	Existing / Non-Qualifying Cost	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years
11800 PS & Well	32%	5%	63%	$ 1,427,049	$ 462,221	$ 70,865	$ 893,963
Lower PS	62%	9%	29%	206,336	128,132	19,391	58,813
Hogs Hollow PS	42%	6%	52%	231,556	96,877	14,853	119,826
18" Transmission Line	32%	5%	63%	137,562	44,556.36	6,831	86,175
Totals				**$ 2,002,503**	**$ 731,787**	**$ 111,939**	**$ 1,158,777**

Table D.4: Qualifying and Non-Qualifying Asset Summary

	Storage	Distribution	Other	Total Cost
Ten Year	9%	6%	0%	0%
Non-Qualifying	91%	94%	100%	0%
Totals	**100%**	**100%**	**100%**	**0%**

Appendix E: Historic City Asset Data

Table E.1: Detailed Asset List

	Description	Owning System	Type	Service Life	In Service	Funding	Qualifying	Function	Original Cost
2	PRESSURE IRRIGATION LAND	PI	System	30.00	Yes	City	Qualifying	Land	$226,000
3	PI LAND - NORTHWEST	PI	System	30.00	Yes	City	Qualifying	Land	$51,450
4	PI PUMP STATION	PI	System	30.00	Yes	City	Qualifying	Building	$321,887
5	DRY CREEK PUMPHOUSE & WELL	PI	System	30.00	Yes	City	Qualifying	Building	$313,115
6	HOG HOLLOW PI BOOSTER STATION	PI	System	30.00	Yes	City	Qualifying	Building	$28,665
7	P.I. WELL & POND	PI	System	30.00	Yes	City	Qualifying	Storage	$587,468
8	NW - PI POND	PI	System	30.00	Yes	City	Qualifying	Storage	$211,019
9	WINDOWS UPGRADE	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$9,375
10	WHEELER POWER SYSTEM	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$22,764
11	VERMEER CHIPPER	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$5,614
12	SCADA SYSTEM	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$7,625
13	BIG TEX TRAILER (Partial Amount)	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$3,280
14	07 FORD PICKUP (Partial Amount)	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$7,241
15	BOOSTER PUMPS 11800 NORTH	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$8,330
16	ELEMENTS WORK ORDER SYSTEM	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$5,328
17	SCADA UPGRADE	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$62,046
18	SCADA SYSTEM UPGRADE	PI	Equipment	10.00	Yes	City	Non-Qualifying	Equipment	$16,325
19	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$600
20	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$9,768
21	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$3,000
22	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$1,599,592
23	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$196,500
24	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$201,000
25	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$222,400
26	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$9,054,424
27	WATER STOCK	PI	System	30.00	Yes	City	Qualifying	Source	$27,140
28	WATER STOCK CONTRIBUTED	PI	System	30.00	Yes	City	Qualifying	Source	$1,386,000
29	DC - WATER CONTRIBUTED	PI	System	30.00	Yes	Developer	Non-Qualifying	Source	$1,670,907
30	WATER PURCHASED BY CITY	PI	System	30.00	Yes	City	Qualifying	Source	$29,337
31	DC - WATER CONTRIBUTED	PI	System	30.00	Yes	Developer	Non-Qualifying	Source	$4,555,040
32	DEVELOPER CONT. - WATER	PI	System	30.00	Yes	Developer	Non-Qualifying	Source	$126,000
33	WATER PURCHASED	PI	System	30.00	Yes	City	Qualifying	Source	$66,600
34	WATER PURCHASES	PI	System	30.00	Yes	City	Qualifying	Source	$285,273
35	WATER SHARE PURCHASES	PI	System	30.00	Yes	City	Qualifying	Source	$76,600
36	CONTAINED WATER SHARES 102.97 FULL	PI	System	30.00	Yes	City	Qualifying	Source	$322,691
37	CONTAINTED WATER SHARES 194.35 LATE	PI	System	30.00	Yes	City	Qualifying	Source	$293,142
38	HIGHLAND CONSV. 1956.1 SAVED & 4 CONTRIBUTED	PI	System	30.00	Yes	City	Qualifying	Source	$1,566,336
39	WATER SHARE PURCHASE	PI	System	30.00	Yes	City	Qualifying	Source	$8,988
40	B.THOMPSON WATER SHARE PURCHASE	PI	System	30.00	Yes	City	Qualifying	Source	$17,748
41	PLANNING COSTS	PI	System	30.00	Yes	City	Qualifying	Distribution	$12,000
42	DESIGN COSTS	PI	System	30.00	Yes	City	Qualifying	Distribution	$550,809
43	CONSTRUCTION ENGINEERING AND MANAGEMENT COSTS	PI	System	30.00	Yes	City	Qualifying	Distribution	$212,145
44	CONSTRUCTION COSTS	PI	System	30.00	Yes	City	Qualifying	Distribution	$8,141,493
45	LEGAL COSTS	PI	System	30.00	Yes	City	Qualifying	Distribution	$36,724
46	FINANCING COSTS	PI	System	30.00	Yes	City	Qualifying	Distribution	$105,571
47									
48									
49									
50									
51									
52									
53									
54									
55									
									$32,665,360.06
									$32,665,360.06

Appendix E Continued: Historic City Asset Data

E.2 :Distribution System Assets

Description	Size	Quantity (Linear Feet)
Pipeline	4 inch	62,560
Pipeline	6 inch	40,690
Pipeline	8 inch	18,430
Pipeline	10 inch	9,315
Pipeline	12 inch	7,755
Pipeline	14 inch	7,355
Pipeline	16 inch	2,685
Pipeline	18 inch	4,450
Pipeline	20 inch	11,990
Pipeline	24 inch	10,925
Pipeline	30 inch	16,416
Pipeline	36 inch	64
Pipeline	42 inch	52
Pipeline	48 inch	407
Total Linear Feet		**193,094**

APPENDIX F: OUTSTANDING WATER DEBT

Table F.1: 2009 Revenue Refunding Bonds Existing Annual Debt Payments

	Principal	Interest	Total D/S	
2010	$ 255,000	$ 172,549	$ 427,549	**2010**
2011	280,000	146,744	426,744	**2011**
2012	290,000	139,044	429,044	**2012**
2013	300,000	131,069	431,069	**2013**
2014	305,000	122,069	427,069	**2014**
2015	315,000	112,538	427,538	**2015**
2016	325,000	102,300	427,300	**2016**
2017	340,000	90,113	430,113	**2017**
2018	350,000	76,513	426,513	**2018**
2019	365,000	62,513	427,513	**2019**
2020	380,000	47,913	427,913	**2020**
2021	395,000	32,713	427,713	**2021**
2022	410,000	16,913	426,913	**2022**
Total	**$ 4,310,000**	**$ 1,252,986**	**$ 5,562,986**	

APPENDIX G: FUTURE WATER DEBT

Table G.1: Series 2020 Projected Future Annual Debt Payments

	Principal	Interest	Total D/S	
2021	$77,000	$ 61,480	$ 138,480	**2021**
2022	80,000	58,400	138,400	**2022**
2023	83,000	55,200	138,200	**2023**
2024	86,000	51,880	137,880	**2024**
2025	90,000	48,440	138,440	**2025**
2026	93,000	44,840	137,840	**2026**
2027	97,000	41,120	138,120	**2027**
2028	101,000	37,240	138,240	**2028**
2029	105,000	33,200	138,200	**2029**
2030	109,000	29,000	138,000	**2030**
2031	114,000	24,640	138,640	**2031**
2032	118,000	20,080	138,080	**2032**
2033	123,000	15,360	138,360	**2033**
2034	128,000	10,440	138,440	**2034**
2035	133,000	5,320	138,320	**2035**
Total	**$ 1,537,000**	**$ 536,640**	**$ 2,073,640**	

APPENDIX H: CALCULATION OF THE IMPACT FEE PER ACRE

TABLE H.1: IMPACT FEE CALCULATION

Component	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (Irrigated Acres)	Cost per Irrigated Acre
Storage Impact Fee					
Future 10 Year Capital Projects	$ 2,624,076	33%	$ 858,789	244	$ 3,520
Future Storage Related Debt to be Issued - INTEREST ONLY	346,019	33%	113,243	244	464
Existing Storage Projects	9,877,766	8.54%	844,026	244	3,459
Existing Storage Related Debt - INTEREST ONLY	1,037,588	8.54%	88,659	244	363
Storage Subtotal	**$ 13,885,449**		**$ 1,904,716**		**$ 7,806.21**
Distribution Impact Fee					
Future 10 Year Capital Projects	$ 664,769	24.80%	$ 164,830	244	$ 676
Future Distribution Related Debt to be Issued - INTEREST ONLY	190,621	24.80%	47,265	244	194
Existing Distribution Projects	1,770,947	5.59%	98,995	244	406
Existing Distribution Related Debt - INTEREST ONLY	215,398	5.59%	12,041	244	49
Distribution Subtotal	**$ 2,841,735**		**$ 323,131**		**$ 1,324.31**
Other Impact Fee					
Future 10 Year Capital Projects	$ 48,200	100%	$ 48,200	244	$ 198
Future Other Related Debt to be Issued - INTEREST ONLY	-	100%	-	244	-
Existing Other Projects	-	0.00%	-	244	-
Existing Other Related Debt - INTEREST ONLY	-	0.00%	-	244	-
Other Subtotal	**$ 48,200**		**$ 48,200**		**$ 197.54**
Professional Services/ Credits					
Unspent Impact Fee Funds	-	0.00%	$ -	244	$ -
Professional Services/ Credits	-	0%	-	244	-
Professional Services/Credits Subtotal	**-**		**-**		**-**
Total Impact Fee Per Acre	**$ 16,775,384**		**$ 2,276,047**		**$ 9,328.06**

Appendix I: Pressurized Irrigation Impact Fees

Table I.1: Pressurized Irrigation Impact Fee

Pressurized Irrigation Impact Fee Formula
Step 1: Identify Estimated Lot Size
Step 2: Multiply Lot Size by the Estimated Percentage to be Irrigated
Step 3: Multiply Irrigated Acreage by Impact Fee per Acre of $9,328.06

TABLE I.2: SAMPLE IMPACT FEE CALCULATIONS

Lot Size	Acreage	% Irrigable	Proposed Fee
	Step 1	Step 2	Step 3
1/4 Acre	0.25	38%	$ 886
1/2 Acre	0.5	54%	2,519
1 Acre	1	70%	6,530

Sample figures only. Actuals will be determined on a case by case basis.