PRESSURIZED IRRIGATION IMPACT FEE FACILITY PLAN AND IMPACT FEE ANALYSIS

(HAL Project No.: 406.03.200)

Adopted August 16, 2023

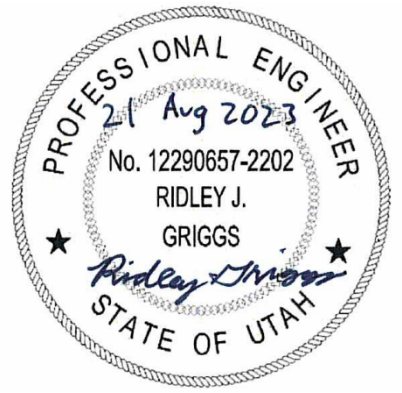
HANSEN ALLEN & LUCE inc
ENGINEERS

SALEM CITY

PRESSURIZED IRRIGATION WATER

IMPACT FEE ANALYSIS

(HAL Project No.: 406.03.200)



Ridley J. Griggs, P.E.

Project Engineer

HANSEN ALLEN & LUCE INC
ENGINEERS

AUGUST 2023

IMPACT FEE CERTIFICATION

The Utah Impact Fee Act requires certifications for the Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA). Hansen, Allen & Luce, Inc. provides these certifications with the understanding that the recommendations in the IFA are followed by City Staff and elected officials. If all or a portion of the IFA are modified or amended, or if assumptions presented in this analysis change substantially, this certification is no longer valid. All information provided to Hansen, Allen & Luce, Inc. is assumed to be correct, complete, and accurate.

IFFP Certification

Hansen, Allen & Luce, Inc. certifies that the Impact Fee Facilities Plan (IFFP) prepared for the pressurized irrigation water system:

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.

IFA Certification

Hansen, Allen & Luce, Inc. certifies that the Impact Fee Analysis (IFA) prepared for the pressurized irrigation water system:

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. costs with grants or other alternate sources of payment; and
3. complies in each and every relevant respect with the Impact Fees Act.

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IMPACT FEE SUMMARY

The **purpose** of the Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) is to comply with the requirements of the Utah Impact Fees Act by identifying demands placed on the existing pressurized irrigation water system by new development and by identifying the means by which the City will meet these new demands. The Salem City Pressurized Irrigation Water System Master Plan has been used in support of this analysis. There are several growth-related capital facilities anticipated to be needed in the next 10 years, so the calculated impact fee is based on anticipated capital facility projects as well as existing excess capacity and documented historic costs.

The impact fee **service area** is the pressurized irrigation water system service area, which includes the current city boundary and future areas anticipated to be annexed into the city.

The proposed **level of service** for the pressurized irrigation water system includes the following:

Level of Service

- Peak Day Source Capacity: 6.0 gallons per minute per irrigated acre (gpm/irr-ac)
- Source Volume: 3.2 acre-feet/irr-ac (Annual Demand)
- Storage Capacity: 6,480 gallons/irr-ac
- Distribution Capacity: 40 pounds per square inch (psi) minimum pressure during peak day demand conditions

The existing system served about 501 irrigated acres at the end of 2022. Projected **growth** adds 489 irrigated acres in the next 10 years, for a total of 990 irrigated acres.

The pressurized irrigation water system has no existing deficiencies. The costs calculated for the capacity required for growth in the next 10 years comes from the proportional historical buy-in costs of **excess capacity** and **new projects** required entirely to provide capacity for new development.

The **pressurized irrigation water impact fee** is calculated based on the estimated cost of projects needed to support anticipated growth. The fee is calculated to be $35,116 per irrigated acre or $6,496 per typical single-family connection. A typical single-family connection is assumed to have an area of 0.155 irrigated acres, plus 0.03 irrigated acres for parks and open space. While this cost is listed for reference, it is recommended that Salem City charge pressurized irrigation impact fees based on lot size (see Table 3-14 in the report). There are certain areas within the City that are not planned to be served by the pressurized irrigation system and will have to be served by the drinking water system. These users will still have to pay the impact fee per irrigated acre specified in this report. This was accounted for in the calculations for both the drinking water and pressurized irrigation fee. The overall impact fee is lower as the costs to connect these areas to the pressurized irrigation system would increase the overall fee versus keeping them on the drinking water system, therefore helping all users.

A summary of the impact fee per irrigated acre is shown below.

TOTAL PROPOSED IMPACT FEE PER IRRIGATED ACRE

Component	Per Irrigated Acre
Source	$2,246.76
Storage	$6,495.71
Distribution	$26,227.61
Planning	$145.70
Total	**$35,116**

A summary of the impact fee for residential connections of varying lot sizes is summarized in the table below.

TOTAL PROPOSED IMPACT FEE FOR TYPICAL SINGLE-FAMILY CONNECTIONS

Lot size (sq. ft.)	Irrigated Acreage	Impact Fee
5,000	0.062	$2,162
8,000	0.103	$3,633
10,000	0.133	$4,681
12,000	0.154	$5,407
15,000	0.185	$6,495

SECTION 1
INTRODUCTION

1.1 Background

Salem City is located in southern Utah County, between I-15 and Loafer Mountain. Salem had an estimated population of 10,770 in 2022 (United States Census Bureau). The primary pressurized irrigation water source for Salem is the Strawberry High Line Canal. The drinking water system also provides supplementary source capacity.

1.2 Purpose

The City has recognized the need to plan for increased demands on its pressurized irrigation water system as a result of growth. To do so, an Impact Fee Facility Plan (IFFP) and Impact Fee Analysis (IFA) were completed to allow the City to charge an impact fee to help pay for capital projects necessary to support future growth.

This report identifies those items that the Utah Impact Fees Act specifically requires, including demands placed upon existing facilities by new development, and the proposed means by which the municipality will meet those demands. A pressurized irrigation water master plan was prepared to support this analysis. The master plan identified several growth-related projects needed within the 10-year planning window. Therefore, the calculated impact fee is based on excess capacity and documented historic costs, as well as future capital projects.

1.3 Impact Fee Collection

Impact fees enable local governments to finance public facility improvements necessary for growth, without burdening existing customers with costs that are exclusively attributable to growth.

An impact fee is a one-time charge on new development to pay for that portion of a public facility that is required to support that new development.

In order to determine the appropriate impact fee, the cost of the facilities associated with future development must be proportionately distributed. As a guideline in determining the "proportionate share", the fee must be found to be roughly proportionate and reasonably related to the impact caused by the new development.

1.4 Master Planning

A pressurized irrigation water system master plan was prepared in conjunction with this analysis. The master plan for the City's pressurized irrigation water system is more comprehensive than the IFFP and IFA. It provides the basis for the IFFP and IFA and identifies all capital facilities required for the pressurized irrigation water system inside the 20-year

planning range, including maintenance, repair, replacement, and growth-related projects. The recommendations made within the master plan are in compliance with current City policies and standard engineering practices.

A hydraulic model of the pressurized irrigation water system was used to complete the pressurized irrigation water system master plan. The model was used to assess existing performance, level of service, to establish a proposed level of service and to confirm the effectiveness of the proposed capital facility projects to maintain the proposed level of service over the next 10 years.

SECTION 2
SYSTEM DEMAND AND CAPACITY

2.1 General

The purpose of this section is to identify the current level of service, characterize the facilities of the existing system, and determine the remaining capacity of these facilities.

The existing pressurized irrigation water system is comprised of a pipe network, water sources, and two water storage ponds. Figure 2-1 illustrates the existing water system and its service area.

2.2 Existing Irrigated Acreage

Water demands for all users have been characterized in terms of irrigated acreage. The use of irrigated acreage is a common engineering practice to describe the entire system's usage based upon a common unit of measurement. Using irrigated acres for analysis is a way to allocate existing and future demands over both residential and non-residential land uses.

At the end of 2022, the City was estimated to have 501 irrigated acres served by the pressurized irrigation water system. Irrigated areas served by the drinking water system were not considered in this analysis.

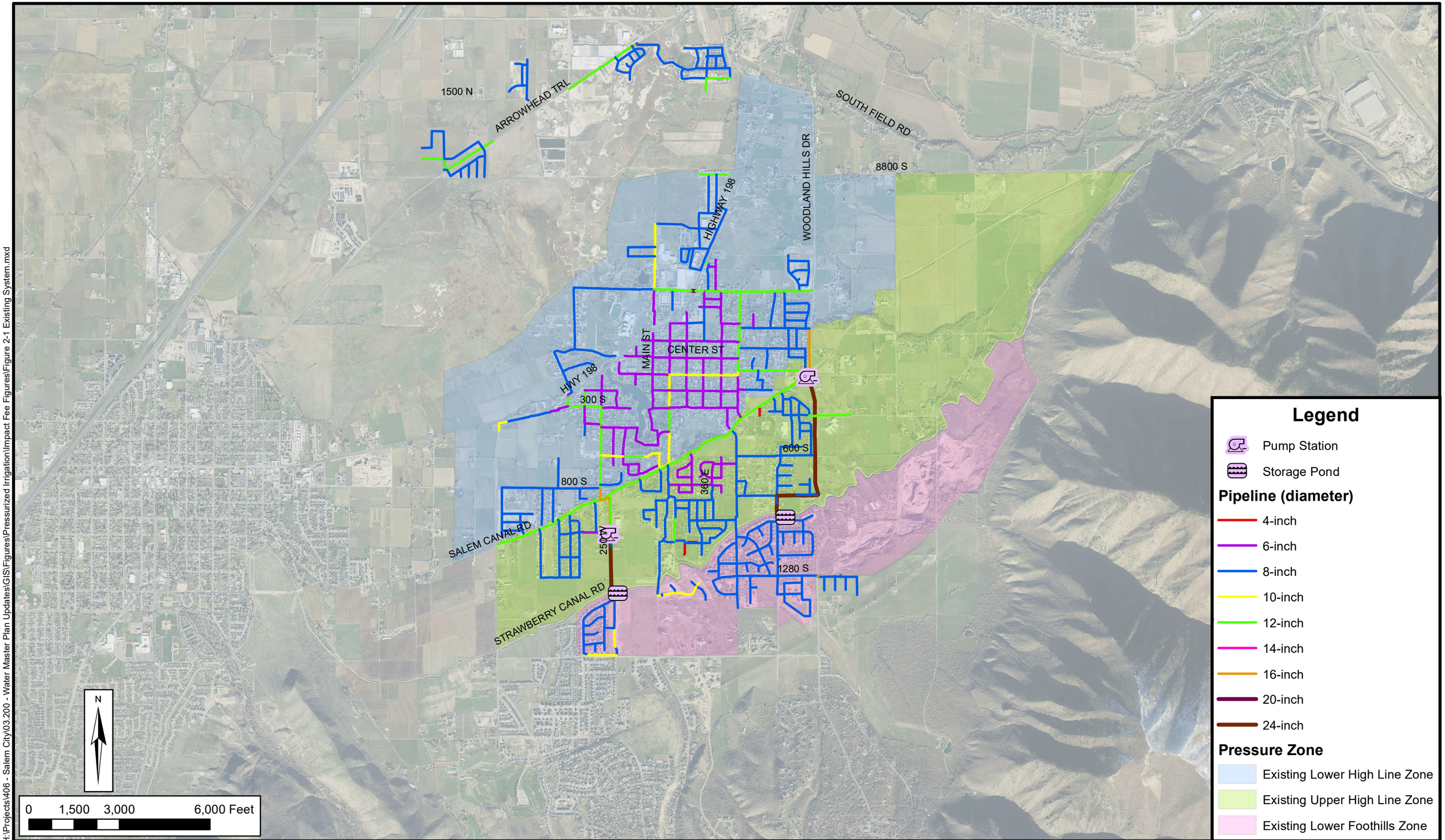
2.3 Level of Service

The City has established a level of service for the pressurized irrigation water system. It establishes the sizing criteria for the City's distribution (pipelines), source, storage facilities, and water rights. The level of service standards are shown in Table 2-1.

TABLE 2-1
LEVEL OF SERVICE REQUIREMENTS

Requirement (per Irrigated Acre)	Requirement
Peak Day Source (gpm)	6.0
Annual Source Volume (ac-ft/yr)	3.2
Storage Capacity (gal)	6,480

The level of service for distribution capacity is that it must provide a minimum peak day service pressure of 40 psi.



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EXISTING PRESSURIZED IRRIGATION SYSTEM

FIGURE 2-1

2.4 Methodology Used to Determine Existing System Capacity

Each component of the pressurized irrigation water system was assessed a capacity in terms of irrigated acres. Irrigated acreage was calculated based on lot areas and defined irrigation factors for each land use type, which were determined by analyzing aerial imagery for each land use type across Salem City.

System components include source (surface water facilities and pump stations), storage (ponds), distribution (pipes), planning, and water rights. The remaining capacity of a facility is defined as the difference between its capacity and the demand imposed on it (both expressed in terms of irrigated acreage). A hydraulic model was developed for the purpose of assessing system operation and distribution capacity.

2.5 Water Source & Remaining Capacity

Salem City's source of pressurized irrigation water comes primarily from the Strawberry High Line Canal. Water from the drinking water system serves as a backup. That capacity is not being considered in this report as the drinking water system requires it. Table 2-2 summarizes the physical capacity of each source and all sources total.

TABLE 2-2
EXISTING WATER SOURCES

Source	Available Peak Day Flow (gpm)	Annual capacity (ac-ft)[2]
Highline Canal	4,000[1]	1,688
TOTAL	**4,000**	**1,688**

1. Available peak day flow is based on peak instantaneous capacity of the filters in the pump station.
2. Based on canal company shares held by Salem City and assuming a dry year. See Appendix D in Master Plan.

Table 2-3 shows a comparison of the available source and the system demand for peak day and average year.

TABLE 2-3
SOURCE DEMAND AND CAPACITY

Demand Condition	Demand	Existing Capacity	Remaining Capacity
Peak Day (gpm)	3,006	4,000	+994
Average Yearly (ac-ft/yr)	1,603	1,688	+85

There is source capacity remaining in the system for both the peak day and average yearly demand conditions.

2.6 Storage Facilities & Remaining Capacity

Salem City operates two equalization storage ponds with a total capacity of 20.0 ac-ft. See Table 2-4.

TABLE 2-4
EXISTING WATER STORAGE

Pond	Capacity (ac-ft)	Existing Demand (ac-ft)	Remaining Capacity (ac-ft)	Remaining Capacity (irr-ac)
East Pond	10.0	-	-	-
West Pond	10.0			
TOTAL	**10.0**	**9.96**	**10.04**	**505**

2.7 Water Rights & Remaining Capacity

The City ensures an adequate supply of water rights by requiring a transfer of water rights and/or water shares to the City as a condition of development. They are not included in the impact fee.

2.8 Distribution System and Remaining Capacity

Pipe diameters range from 6 inch to 24 inches in diameter. The larger pipes in the system were provided as distribution lines to provide conveyance from the ponds the service area. Figure 2-1 illustrates the existing distribution pipelines. The current area served by distribution pipes is limited, so more pipes will be needed to support future growth.

2.9 Capital Facilities to Meet System Deficiencies

The City's 2022 pressurized irrigation system master plan revealed no existing deficiencies in the distribution system. Projects are needed in order to support future growth.

SECTION 3
IMPACT FEE FACILITY PLAN AND ANALYSIS

3.1 General

Data presented in the previous section was used to calculate a proposed impact fee based on an appropriate buy-in cost of existing excess capacity and the cost of projects required to support growth. This section documents expenses previously incurred and estimated costs of future projects, and discusses possible revenue sources for the City to consider.

3.2 Growth Projections

The development of impact fees requires growth projections over the next ten years. Growth projections for Salem were made by estimating future irrigated acreage in areas identified by City personnel as most likely to develop during the next ten years. Total growth projections for the City through 2032 are summarized in Table 3-1.

TABLE 3-1
GROWTH PROJECTIONS
OVER NEXT TEN YEARS

Year	Irrigated Acres
2022	501
2023	526
2024	552
2025	581
2026	611
2027	644
2028	793
2029	845
2030	897
2031	942
2032	990
10-year Difference	**+489**

The existing system served about 501 irrigated acres at the end of 2022. Projected growth adds 489 irrigated acres in the next 10 years for a total of 489 irrigated acres.

3.3 Cost of Existing Pressurized Irrigation Water Facilities

The facilities and costs presented in Table 3-2 are existing facilities with remaining buy-in capacity. The historical costs for the existing facilities come from City records. Costs of these projects are included in Appendix A.

TABLE 3-2
TYPE AND COST OF EXISTING FACILITIES

Project	Source	Storage	Distribution	Total
Pump/filter stations	$1,216,771.76	$0.00	$0.00	$1,216,771.76
Ponds	$0	$2,108,222.18	$0.00	$2,108,222.18
Distribution pipes	$0	$0.00	$5,563,272.95	$5,563,272.95
Total	**$1,216,771.76**	**$2,108,222.18**	**$5,563,272.95**	**$8,888,266.89**

The impact fee eligible cost for each facility is shown below in Table 3-3. These values are based on the remaining capacity for each facility. The remaining cost is attributable to growth and can be counted towards the impact fee.

TABLE 3-3
IMPACT FEE ELIGIBLE COST OF EXISTING FACILITIES

Project	Total Cost	% To Growth[1]	Eligible Source Cost	Eligible Storage Cost	Eligible Distribution Cost	Total
Pump/filter stations	$1,216,771.76	24.9%	$302,367.78	$0.00	$0.00	$302,367.78
Ponds	$2,108,222.18	50.2%	$0.00	$1,058,002.73	$0.00	$1,058,002.73
Distribution pipes	$5,563,272.95	83.3%	$0.00	$0.00	$4,632,344.51	$4,632,344.51
Total	**$8,888,266.89**	**-**	**$302,367.78**	**$1,058,002.73**	**$4,632,344.51**	**$5,992,715.03**

1. See Table 3-4 for impact fee eligible cost.

Percent eligible cost for each component of the existing infrastructure is summarized in Table 3-4 and corresponds to the eligible cost for source, distribution, and storage shown in Table 3-3.

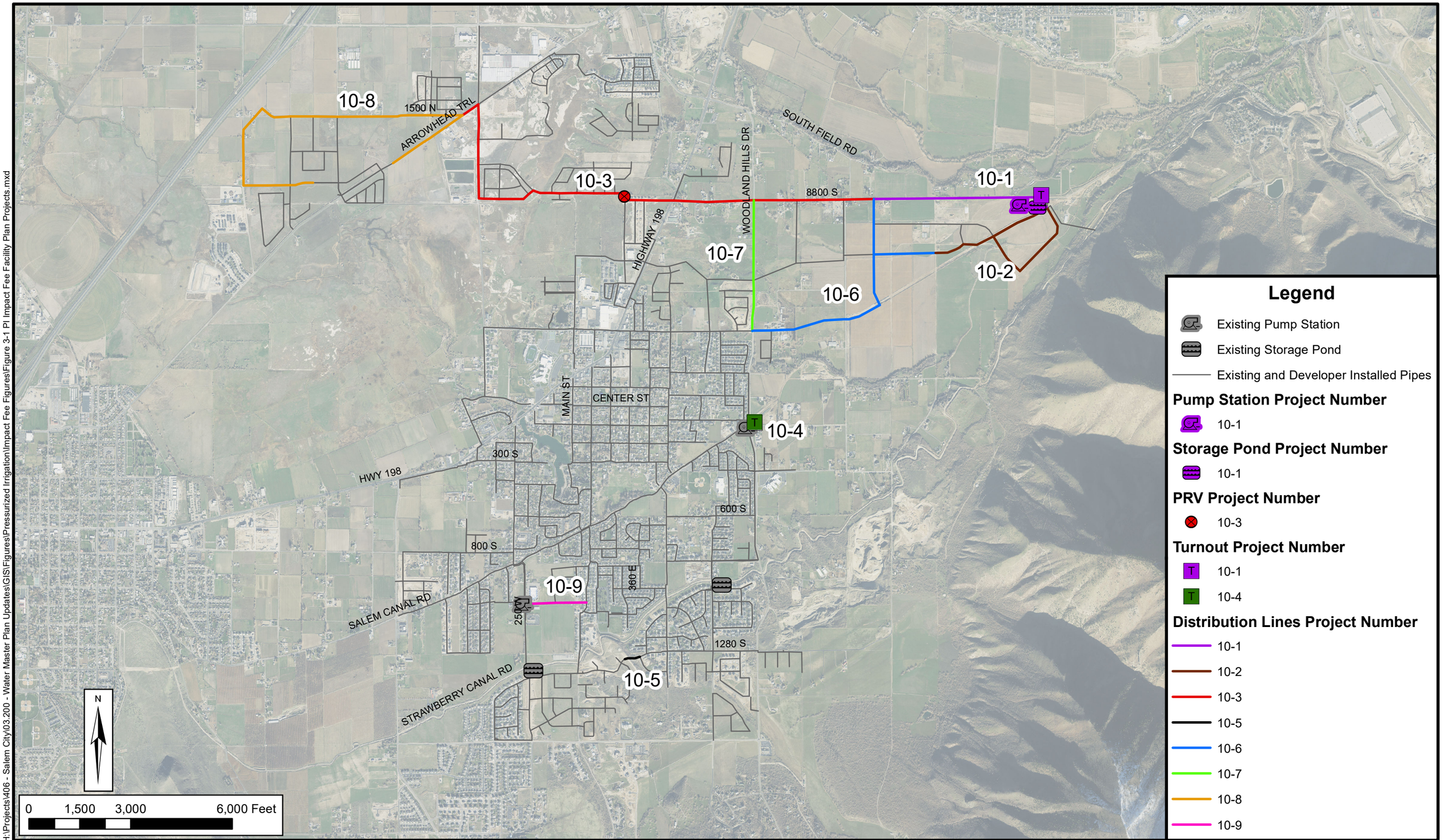
TABLE 3-4
IMPACT FEE ELGIBLE COST CALCULATIONS

	Pump/filter stations (Source)	Ponds (Storage)	Distribution Pipes (Distribution)
Capacity of Existing Facilities[1]	4,000 gpm	20 ac-ft	2,994 irr-ac
Existing Demand[1]	3,006 gpm	9.96 ac-ft	501 irr-ac
Buy-in Capacity[2]	994 gpm	10.04 ac-ft	2,493 irr-ac
% Eligible[3]	**24.9%**	**50.2%**	**83.3%**

1. See Tables 2-2 and 2-3.
2. Calculated as the difference between capacity of the facilities and existing demand.
3. Calculated as the buy-in capacity divided by the capacity of facilities.

3.4 Cost of Future Pressurized Irrigation Water Facilities

A hydraulic model was prepared for future scenarios to determine the facilities necessary to serve growth through the 10-year planning period. These facilities are shown in Table 3-5 and on Figure 3-1. Estimated costs include only the upsize portion of cost anticipated to be paid by the City.



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IMPACT FEE FACILITY PLAN PROJECTS

FIGURE 3-1

TABLE 3-5
ESTIMATED COST OF FUTURE FACILITIES

Project	Map ID*	Total Cost	% To Growth	Source	Storage	Distribution	Total	Capacity Added[1]
Viridian Farms Source and Storage	10-1	$19,092,000.00	100%	$3,360,000.00	$8,100,000.00	$7,632,000	$19,092,000.00	8,000 gpm 18 ac-ft Distribution
Viridian Farms Distribution 1	10-2	$5,916,000.00	100%	$0	$0	$5,916,000.00	$5,916,000.00	Distribution
Moonlight Village Distribution Line	10-3	$16,572,000.00	100%	$0	$0	$16,572,000.00	$16,572,000.00	Distribution
ULS Turnout	10-4	$930,000.00	100%	$930,000	$0	$0.00	$930,000.00	3,270 gpm
Lower Foothill Zone Distribution Line	10-5	$240,000.00	100%	$0	$0	$240,000.00	$240,000.00	Distribution
Viridian Farms Distribution Line 2	10-6	$5,340,000.00	100%	$0	$0	$5,340,000.00	$5,340,000.00	Distribution
Lower Highline Distribution Line	10-7	$3,276,000.00	100%	$0	$0	$3,276,000.00	$3,276,000.00	Distribution
Arrowhead Distribution Line	10-8	$7,800,000.00	100%	$0	$0	$7,800,000.00	$7,800,000.00	Distribution
Upper Highline Distribution Line	10-9	$1,140,000.00	100%	$0	$0	$1,140,000.00	$1,140,000.00	Distribution
Total		**$60,306,000.00**	**-**	**$4,290,000.00**	**$8,100,000.00**	**$47,916,000.00**	**$60,306,000.00**	**-**

1. Distribution capacity is discussed later in this report.

3.5 Impact Fee Unit Calculation

Impact fee calculations are based on irrigated acreage. It is recommended that the City base single-family residential impact fees on lot size. For multi-family or nonresidential developments, it is recommended that the City document irrigated acreage of developments and charge impact fees accordingly.

Source

The impact fee eligible cost of existing and future source projects is shown in Table 3-6.

TABLE 3-6
SOURCE IMPACT FEE UNIT CALCULATION

	Existing[1]	Future[2]	Total
Eligible Cost	$302,367.78	$4,290,000.00	$4,592,367.78
Capacity (gpm)	994	11,270	12,264
		Source impact (per gpm)[3]:	**$374.46**
		Source impact (per irr-ac)[4]	**$2,246.76**

1. See Table 2-2 and 3-3
2. See Table 3-5
3. Calculated as the sum of existing and future eligible costs divided by the sum of existing and future eligible capacity
4. Calculated at a proposed level of service of 6 gpm/irr-ac

Table 3-7 shows source costs by time period.

TABLE 3-7
SOURCE COST BY TIME PERIOD

Time Period	Irr-ac served	Buy-in Cost	Growth Cost	Total Cost
Existing	501	$914,403.98	$0.00	$914,403.98
Next 10 years	489	$72,403.99	$1,027,269.19	$1,099,673.17
Beyond 10 years	2,004	$229,963.79	$3,262,730.81	$3,492,694.61
Total	**2,994**	**$1,216,771.76**	**$4,290,000.00**	**$5,506,771.76**

Storage

The impact fee eligible cost of existing and future storage projects is shown in Table 3-8.

TABLE 3-8
STORAGE IMPACT FEE UNIT CALCULATION

	Existing[1]	Future[2]	Total
Eligible Cost	$1,058,002.73	$8,100,000.00	$9,158,002.73
Capacity (gal)	3,270,540.0	5,865,318	9,135,858
		Source impact (per gal)[3]:	**$1.00**
		Source impact (per irr-ac)[4]	**$6,495.71**

1. See Table 2-3 and 3-3
2. See Table 3-5
3. Calculated as the sum of existing and future eligible costs divided by the sum of existing and future eligible capacity
4. Calculated at a proposed level of service of 6,480 gpm/irr-ac

Table 3-9 shows storage costs by time period.

TABLE 3-9
STORAGE COST BY TIME PERIOD

Time Period	Irr-ac served	Buy-in Cost	Growth Cost	Total Cost
Existing	501	$1,050,219.45	$0.00	$1,050,219.45
Next 10 years	489	$367,299.48	$2,812,020.90	$3,179,320.39
Beyond 10 years	2,004	$690,703.25	$5,287,979.10	$5,978,682.35
Total	**2,994**	**$2,108,222.18**	**$8,100,000.00**	**$10,208,222.18**

Distribution

The portion of the distribution impact fee attributable to growth within 10 years was calculated based on the total future growth in irr-ac as projected in the master plan. See Table 3-10.

TABLE 3-10
DISTRIBUTION IMPACT FEE UNIT CALCULATION

	Existing[1]	Future[2]	Total
Eligible Cost	$4,632,344.51	$47,916,000	$52,548,344.51
Capacity (irr-ac)[3]	2,004	2,004	2,004
Distribution Impact (per irr-ac)[4]			**$26,227.61**

1. See Table 3-3
2. See Table 3-5
3. Distribution infrastructure is sized to accommodate future users through year 2060. A remaining capacity of 2,004 irr-ac was calculated as the projected year 2060 irrigable acreage (2,994) minus irrigable acreage existing at the end of year 2022 (501).
4. Calculated as the sum of existing and future eligible costs divided by the sum of existing and future eligible capacity

Expected distribution costs by timed period are listed in Table 3-11. Distribution facilities are expected to support growth for more than 10 years. The portion of their costs attributable to growth outside of the 10-year planning window is not included in the impact fee.

TABLE 3-11
DISTIRUBTION COST BY TIME PERIOD

Time Period	Irr-ac served	Buy-in Cost	Growth Cost	Total Cost
Existing	501	$930,928.44	$0.00	$930,928.44
Next 10 years	489	$1,131,640.32	$11,705,450.06	$12,837,090.38
Beyond 10 years	2,004	$3,500,704.20	$36,210,549.94	$39,711,254.13
Total	**2,994**	**$5,563,272.95**	**$47,916,000.00**	**$53,479,272.95**

Planning

The planning portion of the impact fee was calculated as shown in Table 3-12. Portions of the City's 2022 master plan study that are attributable to growth (approximately 60% of total expenditures) are impact fee eligible. 100% of costs associated with the Impact Fee Facility Plan and Impact Fee Analysis are impact fee eligible.

TABLE 3-12
PLANNING COMPONENT OF IMPACT FEE

Planning Document	Cost	% of Plan Associated with Growth	Cost Associated with Growth	Irr-ac Served	Cost per Irr-ac
2022 Water Master Plan	$19,500.00	60%	$11,700.00	143	$81.64
2022 IFFP and IFA	$5,100.00	100%	$5,100.00	80	$64.06
Total	$24,600.00	-	$16,800.00	-	$145.70

1. It is assumed that the Master Plan will be updated every 5 years and the IFFP and IFA will be updated every 3 years.

3.6 Total Impact Fee Calculation for a Typical Single-Family Residence

The total impact fee per irrigated acre is **$35,116** (see Table 3-13). There are certain areas within the City that are not planned to be served by the pressurized irrigation system and will have to be served by the drinking water system. These users will still have to pay the impact fee per irrigated acre specified in this report. This was accounted for in the calculations for both the drinking water and pressurized irrigation fee. The overall impact fee is lower as the costs to connect these areas to the pressurized irrigation system would increase the overall fee versus keeping them on the drinking water system, therefore helping all users.

TABLE 3-13
TOTAL PROPOSED IMPACT FEE

Component	Per Irrigated Acre
Source	$2,246.76
Storage	$6,495.71
Distribution	$26,227.61
Planning	$145.70
Total	**$35,116**

It is recommended that the City charge impact fees on a per-irrigated acre basis for all nonresidential and multi-family residential developments. For single-family residential developments, the impact fee should be charged as shown in Table 3-14. This will ensure each connection pays a proportionate share.

TABLE 3-14
TOTAL PROPOSED IMPACT FEE BY LOT SIZE

Lot size (sq. ft.)	% Irrigated	Irrigated Acreage[1]	Impact Fee
5500	25%	0.062	$2,162
6000	30%	0.071	$2,505
7000	35%	0.086	$3,029
8000	40%	0.103	$3,633
9000	45%	0.123	$4,318
10000	45%	0.133	$4,681
11000	45%	0.144	$5,044
12000	45%	0.154	$5,407
13000	45%	0.164	$5,769
14000	45%	0.175	$6,132
15000	45%	0.185	$6,496
16000	50%	0.214	$7,503
17000	50%	0.225	$7,906
18000	50%	0.237	$8,309
19000	50%	0.248	$8,712
20000	55%	0.283	$9,921
21000	55%	0.295	$10,364
22000	60%	0.333	$11,695
23000	60%	0.347	$12,178
24000	60%	0.361	$12,662
25000	60%	0.374	$13,146
26000	60%	0.388	$13,629
27000	60%	0.402	$14,113
28000	60%	0.416	$14,597
29000	60%	0.429	$15,080
30000	60%	0.443	$15,564
31000	60%	0.457	$16,048
32000	60%	0.471	$16,532
33000	65%	0.522	$18,345
34000	65%	0.537	$18,869
35000	65%	0.552	$19,393
36000	65%	0.567	$19,917
37000	65%	0.582	$20,441
38000	65%	0.597	$20,965
39000	65%	0.612	$21,489
40000	65%	0.627	$22,013
41000	65%	0.642	$22,537
42000	65%	0.657	$23,061
43000	65%	0.672	$23,585

1. Includes 0.03 irrigated acres per ERC for parks and open space

3.7 Facility Costs by Time Period

Only those costs attributed to the new growth in the next 10 years can be included in the impact fee. Table 3-15 is a summary of the existing and future facility costs by pressurized irrigation water system component and by time period. Existing costs are those costs attributed to capacity currently being used by existing connections. Costs over the next 10 years are costs for the existing capacity or new capacity for planned growth. Costs attributed to beyond 10 years are costs which will be incurred within 10 years, but provide capacity for growth beyond 10 years.

TABLE 3-15
FACILITY COST BY TIME PERIOD

	Existing	Next 10 Years	Beyond 10 Years	Total
Source	$914,403.98	$1,099,673.17	$3,492,694.61	$5,506,771.76
Storage	$1,050,219.45	$3,179,320.39	$5,978,682.35	$10,208,222.18
Distribution	$930,928.44	$12,837,090.38	$39,711,254.13	$53,479,272.95
Planning	$0.00	$71,313.02	$0.00	$71,313.02
Total	**$2,895,551.86**	**$17,187,396.96**	**$49,182,631.09**	**$69,265,579.91**

3.8 Revenue Options

Revenue options for the recommended projects include: general obligation bonds, revenue bonds, State/Federal grants and loans, user fees, and impact fees. Although this analysis focuses on impact fees, the City may need to consider a combination of these funding options. The following discussion describes each of these options.

General Obligation Bonds through Property Taxes

This form of debt enables the City to issue general obligation bonds for capital improvements and replacement. General Obligation (G.O.) Bonds would be used for items not typically financed through the Water Revenue Bonds (for example, the purchase of water source to ensure a sufficient water supply for the City in the future). G.O. bonds are debt instruments backed by the full faith and credit of the City which would be secured by an unconditional pledge of the City to levy assessments, charges or ad valorem taxes necessary to retire the bonds. G.O. bonds are the lowest-cost form of debt financing available to local governments and can be combined with other revenue sources such as specific fees, or special assessment charges to form a dual security through the City's revenue generating authority. These bonds are supported by the City as a whole, so the amount of debt issued for the water system is limited to a fixed percentage of the real market value for taxable property within the City. For growth

related projects this type of revenue places an unfair burden on existing residents as they had previously paid for their level of service.

Revenue Bonds

This form of debt financing is also available to the City for utility related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by the City as a whole, but constitute a lien against the water service charge revenues of a Water Utility. Revenue bonds present a greater risk to the investor than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure/and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally require a higher interest rate than G.O. bonds, although currently interest rates are at historic lows. This type of debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. Typically, voter approval is not required when issuing revenue bonds. For growth related projects this type of revenue places an unfair burden on existing residents as they had previously paid for their level of service.

State/Federal Grants and Loans

Historically, both local and county governments have experienced significant infrastructure funding support from state and federal government agencies in the form of block grants, direct grants in aid, interagency loans, and general revenue sharing. Federal expenditure pressures and virtual elimination of federal revenue sharing dollars are clear indicators that local government may be left to its own devices regarding infrastructure finance in general. However, state/federal grants and loans should be further investigated as a possible funding source for needed water system improvements.

It is also important to assess likely trends regarding federal / state assistance in infrastructure financing. Future trends indicate that grants will be replaced by loans through a public works revolving fund. Local governments can expect to access these revolving funds or public works trust funds by demonstrating both the need for and the ability to repay the borrowed monies, with interest. As with the revenue bonds discussed earlier, the ability of infrastructure programs to wisely manage their own finances will be a key element in evaluating whether many secondary funding sources, such as federal/state loans, will be available to the City.

Not charging impact fees or significantly lowering them could be viewed negatively from the perspective of State/Federal funding agencies. Charging a proper impact fee signals to these agencies that the community is using all possible means to finance the projects required to provide vital services to their residents.

User Fees

Similar to property taxes on existing residents, user fees to pay for improvements related to new growth-related projects places an unfair burden on existing residents as they had previously paid for their level of service.

Impact Fees

As discussed in Section 1, an impact fee is a one-time charge to a new development for the purpose of raising funds for the construction of improvements required by the new growth and to maintain the current level of service. Impact fees in Utah are regulated by the Impact Fee Statute and substantial case law. Impact fees are a form of a development exaction that requires a fee to offset the burdens created by the development on existing municipal services. Funding the future improvements required by growth through impact fees does not place the burden on existing residents to provide funding of these new improvements.

APPENDIX A

Historic Project Costs

Salem, Utah

$7,500,000 Water Revenue Bonds

Series 2007

(Revised Schedule)

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I
09/01/2011	-	-	-	-
09/01/2012	36,000.00	1.700%	109,696.62	145,696.62
09/01/2013	46,000.00	1.700%	109,084.62	155,084.62
09/01/2014	57,000.00	1.700%	108,302.62	165,302.62
09/01/2015	69,000.00	1.700%	107,333.62	176,333.62
09/01/2016	81,000.00	1.700%	106,160.62	187,160.62
09/01/2017	94,000.00	1.700%	104,783.62	198,783.62
09/01/2018	108,000.00	1.700%	103,185.62	211,185.62
09/01/2019	178,000.00	1.700%	101,349.62	279,349.62
09/01/2020	194,000.00	1.700%	98,323.62	292,323.62
09/01/2021	211,000.00	1.700%	95,025.62	306,025.62
09/01/2022	229,000.00	1.700%	91,438.62	320,438.62
09/01/2023	248,000.00	1.700%	87,545.62	335,545.62
09/01/2024	268,000.00	1.700%	83,329.62	351,329.62
09/01/2025	289,000.00	1.700%	78,773.62	367,773.62
09/01/2026	312,000.00	1.700%	73,860.62	385,860.62
09/01/2027	336,000.00	1.700%	68,556.62	404,556.62
09/01/2028	361,000.00	1.700%	62,844.62	423,844.62
09/01/2029	387,000.00	1.700%	56,707.62	443,707.62
09/01/2030	415,000.00	1.700%	50,128.62	465,128.62
09/01/2031	445,000.00	1.700%	43,073.62	488,073.62
09/01/2032	477,000.00	1.700%	35,508.62	512,508.62
09/01/2033	510,000.00	1.700%	27,399.62	537,399.62
09/01/2034	521,000.00	1.700%	18,729.62	539,729.62
09/01/2035	531,000.00	1.700%	9,872.62	540,872.62
09/01/2036	49,742.17	1.700%	845.62	50,587.79
Total	**$6,452,742.17**	-	**$1,831,861.50**	**$8,284,603.67**

Yield Statistics

Bond Year Dollars	$107,756.55
Average Life	16.699 Years
Average Coupon	1.7000001%
Net Interest Cost (NIC)	1.7000001%
True Interest Cost (TIC)	1.7000001%
Bond Yield for Arbitrage Purposes	-
All Inclusive Cost (AIC)	1.7967321%

IRS Form 8038

Net Interest Cost	1.7000001%
Weighted Average Maturity	16.699 Years

Salem, Utah

$7,500,000 Water Revenue Bonds

Series 2007

(Final Numbers)

Debt Service Schedule

Date	Principal	Coupon	Interest	Total P+I	Fiscal Total
04/17/2007	-	-	-	-	-
09/01/2007	-	-	47,458.33	47,458.33	47,458.33
09/01/2008	-	-	127,500.00	127,500.00	127,500.00
09/01/2009	8,000.00	1.700%	127,500.00	135,500.00	135,500.00
09/01/2010	17,000.00	1.700%	127,364.00	144,364.00	144,364.00
09/01/2011	26,000.00	1.700%	127,075.00	153,075.00	153,075.00
09/01/2012	36,000.00	1.700%	126,633.00	162,633.00	162,633.00
09/01/2013	46,000.00	1.700%	126,021.00	172,021.00	172,021.00
09/01/2014	57,000.00	1.700%	125,239.00	182,239.00	182,239.00
09/01/2015	69,000.00	1.700%	124,270.00	193,270.00	193,270.00
09/01/2016	81,000.00	1.700%	123,097.00	204,097.00	204,097.00
09/01/2017	94,000.00	1.700%	121,720.00	215,720.00	215,720.00
09/01/2018	108,000.00	1.700%	120,122.00	228,122.00	228,122.00
09/01/2019	178,000.00	1.700%	118,286.00	296,286.00	296,286.00
09/01/2020	194,000.00	1.700%	115,260.00	309,260.00	309,260.00
09/01/2021	211,000.00	1.700%	111,962.00	322,962.00	322,962.00
09/01/2022	229,000.00	1.700%	108,375.00	337,375.00	337,375.00
09/01/2023	248,000.00	1.700%	104,482.00	352,482.00	352,482.00
09/01/2024	268,000.00	1.700%	100,266.00	368,266.00	368,266.00
09/01/2025	289,000.00	1.700%	95,710.00	384,710.00	384,710.00
09/01/2026	312,000.00	1.700%	90,797.00	402,797.00	402,797.00
09/01/2027	336,000.00	1.700%	85,493.00	421,493.00	421,493.00
09/01/2028	361,000.00	1.700%	79,781.00	440,781.00	440,781.00
09/01/2029	387,000.00	1.700%	73,644.00	460,644.00	460,644.00
09/01/2030	415,000.00	1.700%	67,065.00	482,065.00	482,065.00
09/01/2031	445,000.00	1.700%	60,010.00	505,010.00	505,010.00
09/01/2032	477,000.00	1.700%	52,445.00	529,445.00	529,445.00
09/01/2033	510,000.00	1.700%	44,336.00	554,336.00	554,336.00
09/01/2034	521,000.00	1.700%	35,666.00	556,666.00	556,666.00
09/01/2035	531,000.00	1.700%	26,809.00	557,809.00	557,809.00
09/01/2036	540,000.00	1.700%	17,782.00	557,782.00	557,782.00
09/01/2037	506,000.00	1.700%	8,602.00	514,602.00	514,602.00
Total	**$7,500,000.00**	-	**$2,820,770.33**	**$10,320,770.33**	-

Yield Statistics

Bond Year Dollars	$165,927.67
Average Life	22.124 Years
Average Coupon	1.7000000%
Net Interest Cost (NIC)	1.7000000%
True Interest Cost (TIC)	1.7001839%
Bond Yield for Arbitrage Purposes	1.7001839%
All Inclusive Cost (AIC)	1.7655751%

IRS Form 8038

Net Interest Cost	1.7000000%
Weighted Average Maturity	22.124 Years

Date	Journal	Reference	Description	Debit Amount	Credit Amount	Balance
*						
*			06/30/2012 (06/12) Period Totals ***	.00	.00	.00
*						
*			06/30/2012 (13/12) Period Totals ***	.00	.00	.00
*						
*			06/30/2012 (14/12) Period Totals ***	.00	.00	.00
*						
*			07/01/2012 (00/12) Period Totals ***	.00	.00	.00
*						
*			07/31/2012 (07/12) Period Totals ***	.00	.00	.00
*						
*			08/31/2012 (08/12) Period Totals ***	.00	.00	.00
*						
*			09/30/2012 (09/12) Period Totals ***	.00	.00	.00
*						
*			10/31/2012 (10/12) Period Totals ***	.00	.00	.00
*						
*			11/30/2012 (11/12) Period Totals ***	.00	.00	.00
*						
*			12/31/2012 (12/12) Period Totals ***	.00	.00	.00
*						
*			01/31/2013 (01/13) Period Totals ***	.00	.00	.00
*						
*			02/28/2013 (02/13) Period Totals ***	.00	.00	.00
*						
*			03/31/2013 (03/13) Period Totals ***	.00	.00	.00
*						
05/09/2013*	AP	288.0001	MOUNTAINLAND SUPPLY C 3470 47317	4,743.23	.00	4,743.23
05/10/2013	AP	359.0001	MOUNTAINLAND SUPPLY CO.,INC.	.00	(94.86)	4,648.37
*			04/30/2013 (04/13) Period Totals ***	4,743.23	(94.86)	4,648.37
*						

Amount type: Actual
Display: Reference detail

Date	Journal	Reference	Description	Debit Amount	Credit Amount	Balance
05/16/2013*	AP	91.0001	ROCKY MOUNTAIN TAPPIN 4405 47350	350.00	.00	4,998.37
05/23/2013*	AP	98.0001	ACE RENTS-SPANISH FOR 190 47356	1,120.36	.00	6,118.73
05/23/2013*	AP	141.0001	SUNROC CORPORATION 5205 44347	214.15	.00	6,332.88
06/04/2013*	AP	253.0001	PAYSON AUTO SUPPLY-NA 3835 47363	59.80	.00	6,392.68
*			05/31/2013 (05/13) Period Totals ***	1,744.31	.00	6,392.68
*						
06/19/2013*	AP	71.0001	MOUNTAINLAND SUPPLY C 3470	508.36	.00	6,901.04
06/19/2013*	AP	72.0001	MOUNTAINLAND SUPPLY C 3470	254.18	.00	7,155.22
06/19/2013*	AP	73.0001	MOUNTAINLAND SUPPLY C 3470 47316	39.81	.00	7,195.03
06/19/2013*	AP	74.0001	MOUNTAINLAND SUPPLY C 3470	5,082.00	.00	12,277.03
06/19/2013*	AP	75.0001	MOUNTAINLAND SUPPLY C 3470	7,030.99	.00	19,308.02
06/19/2013*	AP	76.0001	MOUNTAINLAND SUPPLY C 3470	133.52	.00	19,441.54
06/19/2013*	AP	77.0001	MOUNTAINLAND SUPPLY C 3470	84.48	.00	19,526.02
06/19/2013*	AP	78.0001	MOUNTAINLAND SUPPLY C 3470	1,177.61	.00	20,703.63
06/19/2013*	AP	79.0001	MOUNTAINLAND SUPPLY C 3470	.00	(431.16)	20,272.47
06/19/2013*	AP	80.0001	MOUNTAINLAND SUPPLY C 3470	69.00	.00	20,341.47
06/19/2013*	AP	81.0001	MOUNTAINLAND SUPPLY C 3470	732.40	.00	21,073.87
06/19/2013*	AP	82.0001	MOUNTAINLAND SUPPLY C 3470	229.69	.00	21,303.56
06/19/2013*	AP	83.0001	MOUNTAINLAND SUPPLY C 3470	348.67	.00	21,652.23
06/19/2013*	AP	119.0001	SPEED-E-CRETE CONCRET 4985 47372	229.46	.00	21,881.69
06/19/2013*	AP	143.0001	SUNROC CORPORATION 5205 47426	26.94	.00	21,908.63
06/24/2013*	AP	181.0001	GENEVA ROCK PRODUCTS, 2195 47453	397.72	.00	22,306.35
06/24/2013*	AP	183.0001	GENEVA ROCK PRODUCTS, 2195 47468	59.85	.00	22,366.20
06/24/2013*	AP	190.0001	MOUNTAINLAND SUPPLY C 3470	1,562.00	.00	23,928.20
07/03/2013*	AP	280.0001	GENEVA ROCK PRODUCTS, 2195 47537	76.00	.00	24,004.20
*			06/30/2013 (06/13) Period Totals ***	18,042.68	(431.16)	24,004.20
*						
*			06/30/2013 (13/13) Period Totals ***	.00	.00	24,004.20
*						
06/30/2013	AUDIT	146.0001	Audit JE #17 - book fixed asset additions	.00	(24,004.00)	.20
*			06/30/2013 (14/13) Period Totals ***	.00	(24,004.00)	.20

Amount type: Actual
Display: Reference detail

Date	Journal	Reference	Description	Debit Amount	Credit Amount	Balance
*						
*			07/01/2013 (00/13) Period Totals ***	.00	.00	.00
*						
*			07/31/2013 (07/13) Period Totals ***	.00	.00	.00
*						
*			08/31/2013 (08/13) Period Totals ***	.00	.00	.00
*						
08/21/2013*	AP	217.0001	MOUNTAINLAND SUPPLY CO.,INC.	249.00	.00	249.00
*			09/30/2013 (09/13) Period Totals ***	249.00	.00	249.00
*						
*			10/31/2013 (10/13) Period Totals ***	.00	.00	249.00
*						
*			11/30/2013 (11/13) Period Totals ***	.00	.00	249.00
*						
*			12/31/2013 (12/13) Period Totals ***	.00	.00	249.00
*						
*			01/31/2014 (01/14) Period Totals ***	.00	.00	249.00
*						
05/22/2013*	AP	241.0001	SPEED-E-CRETE CONCRETE LLC	116.97	.00	365.97
*			02/28/2014 (02/14) Period Totals ***	116.97	.00	365.97
*						
*			03/31/2014 (03/14) Period Totals ***	.00	.00	365.97
*						
*			04/30/2014 (04/14) Period Totals ***	.00	.00	365.97
*						
*			05/31/2014 (05/14) Period Totals ***	.00	.00	365.97
*						
*			06/30/2014 (06/14) Period Totals ***	.00	.00	365.97
*						
*			06/30/2014 (13/14) Period Totals ***	.00	.00	365.97
*						

Amount type: Actual
Display: Reference detail

SALEM CITY CORPORATION
EXPENDITURES WITH COMPARISON TO BUDGET
FOR THE 12 MONTHS ENDING JUNE 30, 2019

PRESSURIZED IRRIGATION

		PERIOD ACTUAL	YTD ACTUAL	BUDGET	UNEXPENDED	PCNT
	PRODUCTION					
55-70-11	SALARIES	.00	84,361.39	119,127.00	34,765.61	70.8
55-70-13	EMPLOYEE BENEFITS	.00	31,454.69	53,053.00	21,598.31	59.3
55-70-25	EQUIPMENT SUPPLIES & MANT	.00	32,553.53	50,000.00	17,446.47	65.1
55-70-30	P.I. EQUIP REPLACE/RESERVE	.00	.00	71,715.00	71,715.00	.0
55-70-35	UTILITIES (POWER)	.00	18,040.77	21,486.00	3,445.23	84.0
55-70-41	NEW EQUIPMENT	.00	27,489.22	30,000.00	2,510.78	91.6
55-70-54	PI LINE AT NEW SEWER PLANT	.00	27,810.00	.00	(27,810.00)	.0
55-70-60	WATER DELIVERY FEES	.00	147,834.24	126,578.00	(21,256.24)	116.8
55-70-63	LOST GENERATION FOR STRAWBERRY	.00	.00	10,110.00	10,110.00	.0
55-70-65	PROFESSIONAL SERVICES	.00	20,513.68	18,800.00	(1,713.68)	109.1
	TOTAL PRODUCTION	.00	390,057.52	500,869.00	110,811.48	77.9
	ADMINISTRATIVE & GENERAL					
55-73-60	ADMINISTRATIVE	.00	236,550.00	283,854.00	47,304.00	83.3
55-73-80	MOTOR POOL	.00	12,730.00	15,276.00	2,546.00	83.3
	TOTAL ADMINISTRATIVE & GENERAL	.00	249,280.00	299,130.00	49,850.00	83.3
	CAPITAL OUTLAY/DEBT SERVICE					
55-74-20	2007 PI BOND INTEREST PAYMENT	.00	103,185.61	103,186.00	.39	100.0
55-74-25	2007 PI BOND PRINCIPAL	.00	108,000.00	108,000.00	.00	100.0
	TOTAL CAPITAL OUTLAY/DEBT SERVICE	.00	211,185.61	211,186.00	.39	100.0
	TOTAL FUND EXPENDITURES	.00	850,523.13	1,011,185.00	160,661.87	84.1
	NET REVENUE OVER EXPENDITURES	.00	61,709.08	74,500.00	12,790.92	82.8