

PUBLIC WORKS

WASTEWATER COLLECTION
MASTER PLAN, IFFP, IFA



Utility Board Meeting - November 19th, 2025

Planning Commission - December 09th, 2025

City Council Work Session - January 20th, 2026

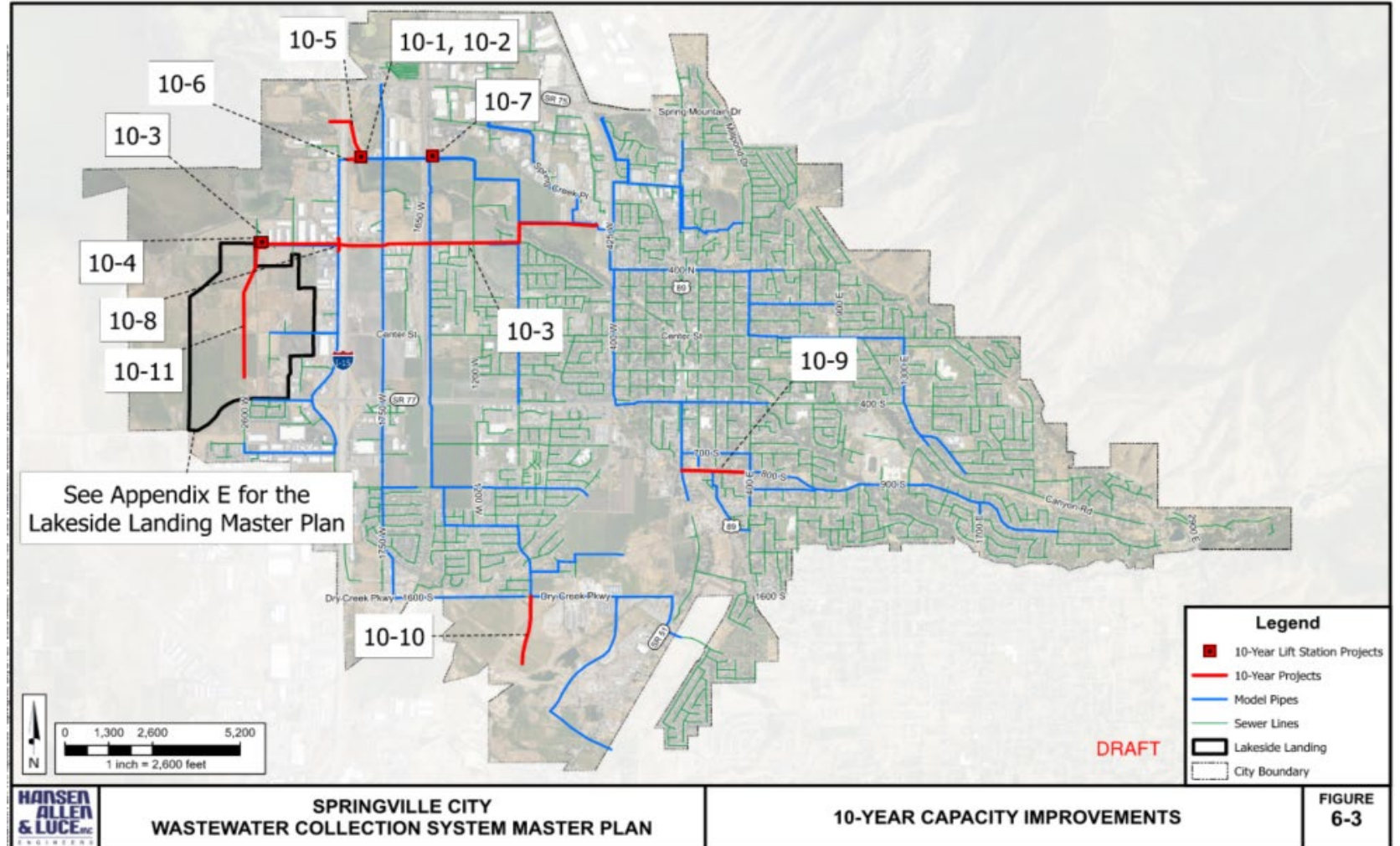
City Council Meeting - Adoption - March 3, 2026



Formulate Capital Projects

Growth Related

10-Year Capacity Improvement Projects





IFFP - Identify Growth Related Projects

Table 3-4
Estimated Cost of Growth-Related Facilities

Project	Map ID ¹	Total Cost ²	Cost for Development Within 10 Years ³
Westfields Lift Station Pump Replacement	10-1	\$98,000	\$29,522
Westfields Lift Station Upgrades	10-2	\$2,841,000	\$855,845
New Lift Station near Spring Pointe	10-3	\$11,167,000	\$3,364,036
Decommission Spring Pointe Lift Station	10-4	\$46,000	\$13,857
Bore under I-15 (1400 N)	10-5	\$1,742,000	\$524,774
1000 N Sewer Under Hobble Creek	10-6	\$573,000	\$172,615
1500 W Lift Station Upgrades	10-7	\$130,000	\$39,162
2000 W and 500 N Sewer Line	10-8	\$281,000	\$84,651
800 S Sewer Line	10-9	\$1,087,000	\$327,457
950 W Sewer Line	10-10	\$27,000	\$8,134
2600 W Sewer Line	10-11	\$419,000	\$126,223
Total		\$18,411,000	\$5,546,276

Growth Related Projects

- Lakeside
- Buc-ee's
- 1600 South

1. Refer to Figure 6-3 of the wastewater collection system master plan for the project and its corresponding ID number. This figure has been included in Appendix A for reference.
2. Only the impact fee eligible costs are shown in this table.
3. Future costs for development within 10 years were calculated for the ERUs within 10 years by assigning a proportionate share of the impact fee eligible costs to the ERUs within 10 years. $(4,452 / 14,778) \times \text{Total Cost}$. Refer to Table 3-6.



PROPOSED WASTEWATER COLLECTION IMPACT FEE

**Table 3-9
Proposed Wastewater Collection Impact Fee Per ERU**

Component	Impact Fee-Eligible Cost	ERUs Served	Cost per ERU
Collection	\$6,125,608	4,452	\$1,376
Planning	\$209,010	4,452	\$47
Total			\$1,423

Current Wastewater Collections Impact Fee - \$1,199



UTAH COUNTY IMPACT FEES COMPARISON

Wastewater Impact Fees:	Current	Proposed
• Collection	\$1,199	\$1,423
• Treatment	<u>\$1,686</u>	<u>\$1,714</u>
Total	\$2,885	\$3,137

8.7% ↑

CITY	WASTEWATER COLLECTION & TREATMENT
Salem	\$10,763
Eagle Mountain	\$10,699
Highland	\$8,704
Woodland Hills	\$7,177
Saratoga Springs	\$7,148
Elk Ridge	\$7,019
Pleasant Grove	\$6,965
Cedar Hills	\$6,860
Lehi	\$6,803
American Fork	\$6,771
Vineyard	\$6,568
Alpine	\$6,294
COUNTY AVERAGE	\$5,854
Santaquin	\$5,096
Provo	\$4,450
Spanish Fork	\$4,215
Mapleton	\$3,157
Springville Proposed	\$3,137
Springville Current	\$2,885
Payson	\$2,848
Lindon	\$1,809
Orem	\$847

PUBLIC WORKS



QUESTIONS?

PUBLIC WORKS

CULINARY WATER &
PRESSURIZED IRRIGATION -
MASTER PLANS, IFFP, IFA



Utility Board Meeting - December 10, 2025
Planning Commission - January 13, 2026
City Council Work Session - February 3, 2026
City Council Meeting Adoption - March 3, 2026



Why Master Plans?

- Establish Levels of Service
- Project/Estimate Growth
- Quantify System Assets
- Verify Sufficient Water Rights
- Run Hydraulic Model
- Formulate Capital Projects





Formulate Capital Projects

Table 7-1: Recommended 10-Year and 20-Year Projects

Type	Map ID ¹	Recommended Project	Total Cost ³	% Impact Fee Eligible	Impact Fee Eligible Cost
Growth Projects, 0-10 Year Phasing (2025-2035)					
Source	10-1	Drill and develop 4,000 gpm well at 900 S Install 1,300 LF 16-inch PVC pipe	\$8,430,000	100%	\$8,430,000
Transmission	10-2	400 West, 900 South to 1600 South 70 LF 10-inch PVC pipe, 560 LF 16-inch PVC pipe and 4,010 LF 18-inch PVC pipe bored under railroad [cost includes boring]	\$3,450,000	100%	\$3,450,000
Transmission	10-3	State Street, 700 South to 1060 South 1,690 LF 12-inch PVC pipe across UDOT ROW [cost includes boring]	\$780,000	100%	\$780,000
Transmission	10-4	State Street, 1600 South 2,520 LF 12-inch PVC pipe across UDOT ROW	\$1,160,000	100%	\$1,160,000
Transmission	10-5	West of I-15, 1000 North to 1400 North 700 LF 10-inch PVC pipe and 6,060 LF 12- inch PVC pipe bored under I-15 [cost includes boring]	\$4,150,000	12%	\$510,000
Transmission	10-6	Center Street, 2250 West to 2400 West 490 LF 16-inch PVC pipe	\$236,000	22%	\$51,000
		Center Street, 2100 West to 2250 West (LGI frontage) 1,100 LF 16-inch PVC pipe ⁴	\$107,670	-	\$107,670 (100%)
Transmission	10-7	Center Street, 2400 West to 2700 W 1,370 LF 12-inch PVC pipe bored under canal [cost includes boring]	\$730,000	12%	\$90,000



Formulate Capital Projects

**Table 7-1
Recommended 0-10 Year Transmission Projects**

Project ID*	Recommendation	Impact Fee Eligible Cost	% Impact Fee Eligible	Total Cost Estimate
10-1	20-inch diameter pipe in 1500 W - from Center St to 700 S - and 24-inch diameter pipe east of 700 S	\$4,370,000	100%	\$4,370,000
10-2**	16-inch diameter pipe in Center Street - from 1200 W to 1500 W	\$2,271,000	100%	\$2,271,000
10-3**	12-inch diameter pipe Center Street – West of 2000 W. This cost is for the remaining portion of pipeline not constructed by LGI	\$280,000	25%	\$1,120,000
	This cost is for the impact fee eligible cost of upsizing the 1,160 LF of pipe that has already been constructed by LGI.	\$73,000	100%	\$73,000
10-4	10-inch diameter pipe in 1750 W - from Center St to 400 S	\$230,000	15%	\$1,460,000
10-5	18-inch diameter pipe in State St (near 1000 S) and PRV to 18" pipe	\$3,470,000	100%	\$3,470,000
10-6	16-inch diameter pipe in State St	\$1,440,000	100%	\$1,440,000
10-7	8-inch diameter pipe in 1600 S - from State St to 950 W	\$1,890,000	100%	\$1,890,000
10-8	8-inch, 10-inch, and 12-inch diameter pipes across Dry Creek area	\$210,000	13%	\$1,560,000
10-9	10-inch diameter pipe in 1700 W - from 700 S to 900 S	\$80,000	14%	\$530,000
10-10	12-inch diameter pipe in 900 S - from 1750 W to 1700 W	\$230,000	25%	\$880,000
10-11	8-inch diameter pipe in 2000 W - from about 500 N to Sweetwater Dr and 6-inch diameter pipe in 500 N - from 2400 W to 2250 West	\$1,560,000	100%	\$1,560,000
10-12	12-inch diameter pipe in 2000 W - from 1000 N to 800 N	\$570,000	100%	\$570,000
10-13	8-inch diameter pipe in 900 S under I-15 and 6-inch diameter pipe in 2200 West under 400 South	\$990,000	100%	\$990,000
10-14	8-inch diameter pipe off 2250 W	\$50,000	7%	\$640,000
10-15	10-inch diameter pipe across 700 S road to connect 30" pipe to 6" pipe and a PRV to 30" pipe near 400 W 700 S	\$550,000	100%	\$550,000
10-16	12-inch and 30-inch diameter pipe in 400 S - from 100 W to 200 W	\$180,000	24%	\$710,000
10-17	8-inch diameter pipe in 100 W to connect to 400 S pipeline	\$40,000	6%	\$580,000
Total		\$18,484,000	75%	\$24,664,000

* See Figure 7-1

** Projects 10-2 and 10-3 are currently under construction by developers. Cost information was provided by the City and is included in Appendix B.



CALCULATING IMPACT FEE ELIGIBLE COSTS

Components:

- Existing System Facilities
 - If Growth uses Available Capacity, Growth pays for it.
- Future System Facilities
 - Growth only pays for what it needs to service its development.
- Planning

Table 3-4
Estimated Impact Fee-Eligible Cost of Future Facilities

Project	Map ID ¹	Total Cost	Percent Eligible for Impact Fee ^{2,3}	Eligible Source Cost	Eligible Distribution Cost	Eligible Storage Cost	Total Eligible Cost	Associated Capacity Added	Cost for Development Within 10 Years ³
<ul style="list-style-type: none"> • Drill and develop 4,000 gpm well at 900 S • Install 1,300 LF 16-inch PVC pipe 	10-1	\$8,430,000.00	100%	\$8,430,000	\$0	\$0	\$8,430,000.00	4,000 gpm	\$1,095,851.51
<ul style="list-style-type: none"> • 400 West, 900 South to 1600 South • 70 LF 10-inch PVC pipe, 560 LF 16-inch PVC pipe and 4,010 LF 18-inch PVC pipe bored under railroad [cost includes boring] 	10-2	\$3,450,000.00	100%	\$0	\$3,450,000.00	\$0	\$3,450,000.00	20,373 ERCs	\$753,880.38
<ul style="list-style-type: none"> • State Street, 700 South to 1060 South • 1,690 LF 12-inch PVC pipe across UDOT ROW 	10-3	\$780,000.00	100%	\$0	\$780,000.00	\$0	\$780,000.00	20,373 ERCs	\$170,442.52
<ul style="list-style-type: none"> • State Street, 1600 South • 870 LF 12-inch PVC pipe across UDOT ROW 	10-4	\$1,160,000.00	100%	\$0	\$1,160,000.00	\$0	\$1,160,000.00	20,373 ERCs	\$253,478.62
<ul style="list-style-type: none"> • West of I-15, 1000 North to 1400 North • 700 LF 10-inch PVC pipe and 6,060 LF 12-inch PVC pipe bored under I-15 [cost includes boring] 	10-5	\$4,150,000.00	12%	\$0	\$510,000.00	\$0	\$510,000.00	20,373 ERCs	\$111,443.19
<ul style="list-style-type: none"> • Center Street, 2250 West to 2400 West • 490 LF 16-inch PVC pipe 	10-6	\$350,000.00	46%	\$0	\$160,000.00	\$0	\$160,000.00	20,373 ERCs	\$34,962.57
<ul style="list-style-type: none"> • Center Street, 2400 West to 2700 W • 1,370 LF 12-inch PVC pipe bored under canal [cost includes boring] 	10-7	\$730,000.00	12%	\$0	\$90,000.00	\$0	\$90,000.00	20,373 ERCs	\$19,666.44
<ul style="list-style-type: none"> • 1200 West, Center Street to 100 South • 700 LF 10-inch PVC pipe bored under canal [cost includes boring] 	10-8	\$390,000.00	10%	\$0	\$40,000.00	\$0	\$40,000.00	20,373 ERCs	\$8,740.64
<ul style="list-style-type: none"> • 1200 West, 200 South to 400 South • 650 LF 12-inch PVC pipe 	10-9	\$280,000.00	16%	\$0	\$50,000.00	\$0	\$50,000.00	20,373 ERCs	\$10,925.80
<ul style="list-style-type: none"> • 1500 West, 400 South to 900 South • 1,380 LF 10-inch PVC pipe and 1,320 LF 12-inch PVC pipe bored under canal [cost includes boring] 	10-10	\$1,200,000.00	12%	\$0	\$150,000.00	\$0	\$150,000.00	20,373 ERCs	\$32,777.41
TOTAL		\$20,920,000.00	-	\$8,430,000	\$6,390,000.00	\$0	\$14,820,000.00	-	\$2,492,169.08

1. Refer to Figure 4-1 in the City's Drinking Water Master Plan for the project and its corresponding ID number. This figure has been included in Appendix A for reference.
 2. In cases where the City is expected to upsize a developer-installed pipe, only the portion attributable to the upsize is considered impact fee eligible.
 3. Future costs for development within 10 years were calculated for the ERCs within 10 years by assigning a proportionate share of the impact fee eligible costs to the ERCs within 10 years. Refer to Tables 3-6 and 3-10.



COMPARING IMPACT FEE COSTS

Staff Recommendation - Indoor \$1,266 and Secondary \$20,953/irr-ac (\$0.4810/SF)

- For *all areas* of the Community.
- Impact Fee Data Comparison from UCHBA
 - All fees are for 4,000 SF home on a 10,000 SF lot
- Proposed Fee for Single Family Home on 10,000 SF Lot:
- **\$1,266 (Indoor) + \$2,305 (outdoor) = \$3,571**
- 33% below County average

CITY	CULINARY WATER	PRESSURIZED IRRIGATION	DRINKING WATER & PRESSURIZED IRRIGATION
Vineyard	\$12,121	\$0	\$12,121
Saratoga Springs	\$2,283	\$6,693	\$8,976
Mapleton	\$1,417	\$6,597	\$8,014
Provo	\$7,600	\$0	\$7,600
Salem	\$2,802	\$4,681	\$7,483
Orem	\$7,359	\$0	\$7,359
Alpine	\$1,163	\$4,667	\$5,830
American Fork	\$2,502	\$3,251	\$5,753
Elk Ridge	\$5,653	\$0	\$5,653
COUNTY AVERAGE	\$3,285	\$2,075	\$5,360
Santaquin	\$1,180	\$4,123	\$5,303
Woodland Hills	\$5,267	\$0	\$5,267
Eagle Mountain	\$4,283	\$0	\$4,283
Highland	\$603	\$3,570	\$4,173
Spanish Fork	\$1,865	\$2,078	\$3,943
Springville Current	\$1,256	\$2,341	\$3,597
Springville Proposed	\$1,266	\$2,305	\$3,571
Payson	\$2,004	\$1,443	\$3,447
Lehi	\$1,194	\$1,402	\$2,596
Cedar Hills	\$1,749	\$657	\$2,406
Pleasant Grove	\$1,932	\$0	\$1,932
Lindon	\$1,467	\$0	\$1,467

PUBLIC WORKS



QUESTIONS?



CALCULATING IMPACT FEE ELIGIBLE COSTS

Components:

- Culinary - No Secondary Water Available
- Indoor - \$1,266 (0.8% ↑)
- Outdoor - \$25,364/irr-ac
- \$0.5823/SF
 - Old fee based on 0.15 acres per ERC
- Secondary Water Available
- Outdoor - \$20,953/irr-ac (34.2% ↑)
 - \$0.4810/SF
 - Exist \$15,608/irr acre or \$0.3583/SF
 - Old fee base on 0.15 acres per ERC

**Table 3-14
Proposed Impact Fee Per
Typical Residential Unit**

Lot Size Min (sq ft)	Lot Size Max (sq ft)	Irrigated Area (acres)	Indoor	Outdoor	Indoor and Outdoor
0	2,000	0.03	\$1,266	\$761	\$2,027
2,000	3,999	0.03	\$1,266	\$761	\$2,027
4,000	5,999	0.06	\$1,266	\$1,522	\$2,788
6,000	7,999	0.09	\$1,266	\$2,283	\$3,549
8,000	10,889	0.11	\$1,266	\$2,790	\$4,056
10,990	21,779	0.15	\$1,266	\$3,805	\$5,071
≥ 21,780		0.35	\$1,266	\$8,877	\$10,143

**Table 3-9
Total Proposed Impact Fee by Lot Size**

Minimum Lot Size (ft ²)	Maximum Lot Size (ft ²)	Irrigated Area (acres)	Infrastructure	Planning	Total
0	2,000	0.03	\$600	\$29	\$629
2,000	3,999	0.03	\$600	\$29	\$629
4,000	5,999	0.06	\$1,200	\$57	\$1,257
6,000	7,999	0.09	\$1,800	\$86	\$1,886
8,000	10,889	0.11	\$2,200	\$105	\$2,305
10,990	21,779	0.15	\$3,000	\$143	\$3,143
≥ 21,780		0.35	\$7,001	\$333	\$7,334

Staff Recommendation - Indoor \$1,266 and Secondary \$20,953/irr-ac (\$0.4810/SF)

- For *all areas* of the Community.